Express Mail Label No. EL466459711US 11/06/60 A

UTILITY PATENT APPLICATION TRANSMITTAL
(Large Entity)

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Docket No.
97-169X

Total Pages in this Submission
61

JC950 U.S. PTO 11/03/00

09/706431 U.S. PTO 11/03/00 c841

TO THE ASSISTANT COMMISSIONER FOR PATENTS
Box Patent Application
Washington, D.C. 20231

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

ELECTRONIC AMUSEMENT DEVICE AND METHOD FOR OPERATING SAME

and invented by:

Jay S. WALKER, James A. JORASCH, and Robert R. LECH

If a CONTINUATION APPLICATION, *check appropriate box and supply the requisite information:*

☒ **Continuation** ☐ **Divisional** ☐ **Continuation-in-part (CIP)** of prior application No.: **09/004,885**

Which is a:

☐ **Continuation** ☐ **Divisional** ☐ **Continuation-in-part (CIP)** of prior application No.: _____

Which is a:

☐ **Continuation** ☐ **Divisional** ☐ **Continuation-in-part (CIP)** of prior application No.: _____

Enclosed are:

Application Elements

1. ☐ Filing fee as calculated and transmitted as described below

2. ☒ Specification having 37 pages and including the following:

   a. ☒ Descriptive Title of the Invention
   b. ☐ Cross References to Related Applications *(if applicable)*
   c. ☐ Statement Regarding Federally-sponsored Research/Development *(if applicable)*
   d. ☐ Reference to Microfiche Appendix *(if applicable)*
   e. ☒ Background of the Invention
   f. ☒ Brief Summary of the Invention
   g. ☒ Brief Description of the Drawings *(if drawings filed)*
   h. ☒ Detailed Description
   i. ☒ Claim(s) as Classified Below
   j. ☒ Abstract of the Disclosure

11/03/00 JC950 U.S. PTO

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Application Elements (Continued)

3. ☒ Drawing(s) *(when necessary as prescribed by 35 USC 113)*

   a. ☒ Formal Number of Sheets **22**

   b. ☐ Informal Number of Sheets _____

4. ☒ Oath or Declaration

   a. ☐ Newly executed *(original or copy)* ☐ Unexecuted

   b. ☒ Copy from a prior application (37 CFR 1.63(d)) *(for continuation/divisional application only)*

   c. ☒ With Power of Attorney ☐ Without Power of Attorney

   d. ☐ *DELETION OF INVENTOR(S)*
   Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. 1.63(d)(2) and 1.33(b).

5. ☒ Incorporation By Reference *(usable if Box 4b is checked)*
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

6. ☐ Computer Program in Microfiche *(Appendix)*

7. ☐ Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all must be included)*

   a. ☐ Paper Copy

   b. ☐ Computer Readable Copy *(identical to computer copy)*

   c. ☐ Statement Verifying Identical Paper and Computer Readable Copy

Accompanying Application Parts

8. ☐ Assignment Papers *(cover sheet & document(s))*

9. ☐ 37 CFR 3.73(B) Statement *(when there is an assignee)*

10. ☐ English Translation Document *(if applicable)*

11. ☒ Information Disclosure Statement/PTO-1449 ☒ Copies of IDS Citations

12. ☒ Preliminary Amendment

13. ☒ Acknowledgment postcard

14. ☒ Certificate of Mailing

    ☐ First Class ☒ Express Mail *(Specify Label No.):* **EL466459711US**

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Accompanying Application Parts (Continued)

15. ☐ Certified Copy of Priority Document(s) *(if foreign priority is claimed)*

16. ☐ Additional Enclosures *(please identify below):*

Fee Calculation and Transmittal

CLAIMS AS FILED

For	#Filed	#Allowed	#Extra		Rate	Fee
Total Claims	1	- 20 =	0	x	$18.00	$0.00
Indep. Claims	1	- 3 =	0	x	$78.00	$0.00
Multiple Dependent Claims (check if applicable) ☐						$0.00
					BASIC FEE	$710.00
OTHER FEE *(specify purpose)*						$0.00
					TOTAL FILING FEE	$710.00

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☒ The Commissioner is hereby authorized to charge and credit Deposit Account No. **50-0271** as described below. A duplicate copy of this sheet is enclosed.

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- ☒ Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
- ☐ Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Signature

Dated: **November 3, 2000**

Nandu A. Talwalkar
Attorney for Applicants
Registration No. 41-339

22927
PATENT TRADEMARK OFFICE

cc:

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10) Applicant(s): JAY S. WALKER et al.	Docket No. 97-169X

Serial No.	Filing Date	Examiner	Group Art Unit
Not Yet Assigned	November 3 , 2000	Not Yet Assigned	Not Yet Assigned

Invention:

ELECTRONIC AMUSEMENT DEVICE AND METHOD FOR OPERATING SAME

I hereby certify that this **CONTINUATION PATENT APPLICATION**
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Walker et al.

Application No.: Not Yet Assigned

Filed: Herewith

For: ELECTRONIC AMUSEMENT DEVICE AND METHOD FOR OPERATING SAME

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

PRELIMINARY AMENDMENT

Attorney Docket No. 97-169X

Walker Digital Corporation
Customer No. 22927
Five High Ridge Park
Stamford, CT 06905-1326
(203) 461-7061/voice
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CERTIFICATE OF MAILING

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Dated: 11/ /00 By: V. Leliever
Veronika S. Leliever

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Prior to examination, entry of the following amendments into the above-identified application is respectfully requested.

AMENDMENT

Please amend the above-identified application as follows:

IN THE SPECIFICATION:

Please amend the specification as follows:

At page 1, after the Title, please insert "This application is a continuation of U.S. Patent Application No. 09/004,885, filed January 9, 1998 for "ELECTRONIC AMUSEMENT DEVICE AND METHOD FOR OPERATING SAME."

At page 9, line 11, please delete "in order facilitate" and insert therefor --in order to facilitate--.

At page 20, line 19, please delete "102 is determines", and insert therefor --102 determines--.

IN THE CLAIMS:

Please **CANCEL** Claims 2 to 35 without prejudice to or disclaimer of the subject matter recited herein.

REMARKS

Applicants presently intend to file an additional paper in this application. Accordingly, if the application is taken up for action prior to receipt of such paper, the Examiner is respectfully requested to contact Applicants' undersigned attorney at the telephone number listed above or by electronic mail at Nandu.Talwalkar@WalkerDigital.com.

Respectfully submitted,

November 3, 2000
Date

Nandu A. Talwalkar
Attorney for Applicants
Registration No. 41,339

COPY

ELECTRONIC AMUSEMENT DEVICE AND METHOD FOR OPERATING SAME

Background of the Invention

Field of the Invention

The present invention relates to an electronic amusement device and more particularly to an electronic amusement device such as a slot machine having the ability to display game symbols which change or expire during a game.

Description of the Related Art

Slot machines generate greater than ten billion dollars per year in revenue for US casinos, with individual machines typically earning between fifty and one hundred and fifty dollars per day. One of the fastest growing segments of slot machine play is video poker, a game in which various elements of draw poker are represented on a video display. Players draw and hold cards in an effort to attain a hand high enough to qualify for a prize or payment. Starting with "Jacks or Better," video poker quickly expanded into "Deuces Wild" and "Joker Poker" as well as countless variations of the above with different payout schedules. Players are attracted to the relatively high payouts possible for top hands such as a royal flush, as well as the frequent lower-end payouts for hands as low as a pair of jacks. Additionally, many players find that the interactive nature of the game, choosing which cards to draw, provides a more exciting game than the traditional reel-based slot machine, in which the player simply passively watches the outcome.

Although popular with players, video poker has a number of disadvantages from the casino's perspective. First, game speed can be significantly slower than conventional reel machines. Players sometimes agonize over a particular play, taking their time in deciding what the correct play is. With no incentive to accelerate play, players sometimes languish over their decisions. Casinos prefer a faster-paced game since profits rise in direct proportion to the number of hands completed per hour. Additionally, the house edge associated with video poker has consistently deteriorated as casinos have begun to compete more for players. Because full payout tables are provided on the face of the machine, players can easily distinguish between high payout machines and low payout machines. Competition for video poker players has resulted in some video poker machines which pay out in excess of 100% with perfect playing strategy. Although most players are not playing perfectly, the growing availability of books and computer software is resulting in more and more sophisticated players. The slow play and declining house advantage, when combined with the significant cost of player complimentaries, such as free meals and drinks, has resulted in shrinking casino profits for video poker. Consequently, there is a need to increase the house advantage without appearing to disadvantage the player.

Thus, it would be very desirable to provide a slot machine which offers to players the involvement and excitement of video poker while offering the casino the speed of play and high house advantage currently associated with traditional reel slot machines. Such a machine could result in significantly enhanced revenues for casino operators and provide more enjoyable play for casino patrons.

Summary of the Invention

An object of the present invention is to provide a gaming device utilizing game symbols that expire throughout a game.

In accordance with one aspect of the present invention, an electronic amusement device and method is disclosed for conducting a game of chance. The method includes the steps of generating a subject game element having a first class, and displaying the subject game element, thereby displaying an indicia of the first class. The method also includes the step of assigning a second class to the subject game element. The method further includes the step of displaying the subject game element, thereby displaying an indicia of the second class. The disclosed electronic amusement device implements the steps of the described method.

In accordance with a second aspect of the present invention, an electronic amusement device and method is disclosed for conducting a game of chance. The method includes the steps of receiving a game element request signal and generating a game element having a first class. The method also includes the step of displaying the game element, thereby displaying an indicia of the first class. The method further includes the steps of receiving a placement signal and displaying the game element at a location in accordance with the received placement signal. A second class is assigned to the game element, and the game element is redisplayed, thereby displaying an indicia of the second class.

Description of the Drawings

These and other objects, features and advantages of the invention will be understood from a consideration of the following description of the invention, in which:

Figure 1 is a block diagram of a gaming device constructed in accordance with the present invention;

Figure 2 is a table showing components of the payout database of Figure 1;

Figure 3 is a table showing components of the card database of Figure 1;

Figure 4 is a plan view of the gaming device of Figure 1;

Figures 5A-5H together comprise sample screens from the video display of Figure 4;

Figure 6 is an illustration of the game element of Figure 4;

Figure 7 is a flowchart illustrating a method of operating a gaming device in accordance with the present embodiment;

Figure 8 is a flowchart illustrating the deck initialization process of the present invention;

Figure 9 is a flowchart illustrating the card dealing process of the present invention;

Figure 10 is a flowchart illustrating the card placement process of the present invention;

Figures 11A-11B together comprise a flowchart illustrating the card monitoring and update process of the present invention;

Figure 12 is a flowchart illustrating the shuffling process of the present invention;

Figure 13 is a flowchart illustrating the payout calculation process of the present invention; and

Figure 14 is a plan view of an alternate embodiment of the gaming device of Figure 1.

Detailed Description of the Invention

Description of the System

In accordance with the present invention there is provided herein a gaming method and apparatus, illustrated by way of a video poker gaming device.

Referring now to Figure 1, there is shown a block diagram of a gaming device 100 including a central processing unit (CPU) 102 and a data storage device 104 connected to the CPU. Further connected to CPU 102 are: a player card tracking device 114, a random number generator 112, a video display area 500, a hopper controller 122, a clock 106, a starting controller 150, and a coin/bill acceptor 124.

Gaming device 100 comprises conventional components, with the exception of card database 300. For purposes of better illustrating the invention, standard components, well known to those skilled in the art, are described only briefly. Although the present embodiment of the invention is described as implemented with physical components, the invention applies equally well to and includes software embodiments such as would be implemented on the Internet and other computer data networks.

Referring again to CPU 102, the device 100 comprises one of many well known processing units, for example a Pentium class CPU manufactured by Intel Corp. Data

storage device 104 comprises an appropriate combination of magnetic and optical memory, such as disk drive memory, and semiconductor memory such as random access memory (RAM) and read only memory (ROM). In addition to payout database 200 and card database 300, data storage device 104 stores appropriate operating system and control software (not shown), functional to operate gaming device 100 in the manner described below. Random number generator 112 comprises one of many well known random or pseudo-random number generators suitable for use in a gaming device.

Coin/Bill acceptor 124 is operative to receive one or more coins or bills, and to transmit an appropriate value signal to CPU 102. Hopper controller 122, and hopper 130 connected thereto, are operative under the control of CPU 102 to dispense and output coins to a player. Video display 500 preferably comprises a touch sensitive screen capable of processing player selections through tactile interaction. Alternatively, video display 500 may comprise any conventional video display apparatus, for example, a cathode ray tube or a liquid crystal display screen.

Starting controller 150 comprises a player-operated device such as a handle or button for initiating the play of a game.

Player card tracking device 114 comprises a player tracking interface including a card reader 138 for receiving a player tracking card, a display 142 for communicating alpha/numeric messages to the player, and a keypad 140 for receiving player input such as a player identifier.

Gaming device 100 may include a conventional network interface (not shown) for communicating with a centrally controlled network server, allowing for the remote monitoring and audit of gaming device 100.

Payout database 200 comprises a conventional payout database such as those found in most video poker machines. The database serves to associate a particular outcome or hand value, such as a full house, with a particular coin payout based on the number of coins wagered. Payout database 200 is shown to include ten records 232 through 250, each of which includes two fields: an outcome field 210 and a payout field 220. The final poker hands represented in outcome 210 illustrate conventional poker rankings typical of a video draw poker game. Record 238, for example, indicates an outcome of "FULL HOUSE" which includes all hands with both three of a kind and two of a kind. Other hand rankings, such as those incorporating jokers, wild cards, or specific card bonuses are, of course, also within the scope of the present invention.

The profitability of the game for the casino is directly related to the values stored in payout field 220, although player skill levels will also have an impact. Payouts 220 might be set so that the casino retains some advantage, even in the face of expert play. Record 238, for example, indicates a payout of five dollars associated with an outcome of "FULL HOUSE." Although the payouts of payout field 220 represent the wager of a single coin for each card purchased, additional fields could be added to allow multiple coin wagers as illustrated in Fig. 4 below. The values shown in payout field 220 are merely illustrative and are not intended to limit the scope of the invention.

Referring now to Figure 3, there is described card database 300 shown to include five records 340, 342, 344, 346, and 348, each of which includes seven fields: card identifier 310, rank 312, suit 314, status 316, location 318, time dealt 320, and duration 322. This database serves to monitor and update a deck of fifty-two cards, each card having a unique rank/suit combination, or class, as implemented in the present invention.

Card identifier 310 uniquely identifies each card, and may be a number from one to fifty-two for each card of a standard deck of cards. Such a numeric identifier simplifies the card manipulation operations as described in more detail with reference to the figures below. Rank 312 identifies the rank of the card and contains the standard deck values of ace, deuce, three, four, five, six, seven, eight, nine, ten, jack, queen, and king. Rank 312 could of course also store non-standard ranks such as wild card, joker, or other bonus type card values. Instead of storing the rank description, rank 312 could simply store numeric identifiers which were associated with descriptions stored in ROM. The suit of each card is stored in suit 314 and may include conventional suits such as hearts, clubs, spades, and diamonds. Record 344, for example, indicates a card with a rank of "J" (a Jack) and a suit of clubs. Wild cards could include a fixed rank with any suit, or a fixed suit with any rank. A suit-wild Jack, for example, might represent either the jack of clubs, jack of diamonds, jack of hearts, or jack of spades.

Although the present embodiment identifies the use of a standard fifty-two card deck with one card of each rank and suit, it should be noted that some card values may be over or underrepresented. Thus, for example, there may be fewer royal cards (ten, jack, queen, king, and ace) and a correspondingly larger number of low value cards. Such an arrangement has the advantage of decreasing the probability that a player attains a royal flush, allowing the machine to offer a higher payout for such a final hand configuration.

The status of each card is stored in status 316, with values indicating where the particular card is within the game cycle as described more fully with reference to Figs. 7 to 13 below. Cards are initially assigned a status of "IN DECK" to indicate that they are ready to enter game play. Once a card has been dealt it is described as "DEALT" and is

displayed to the player in video display 500. Discarded cards have their status changed to "DISCARDED" while cards placed into play maintain their "DEALT" status. After a predetermined amount of time, "DEALT" cards change to "FIRST ALTERATION WARNING," a status which indicates that the card will soon change into another card value, with a corresponding change in status to "FIRST ALTERATION." Associated with such a status change is a change in rank or suit as described more fully with reference to Figure 11 below. A "FINAL ALTERATION WARNING" and "FINAL ALTERATION" status correspond to a second alteration of the card's rank and/or suit. Finally, the card may have a status of "EXPIRATION WARNING" to indicate that the card is about to expire and return to the discarded cards queue.

Each card has a corresponding location 318 in order facilitate tracking of cards throughout the operation of the present invention, identifying either where the card is in the queue prior to being dealt, where the card is in the discard pile, or where the card has been placed by the player. Record 340, for example, indicates that the card is currently scheduled to be the fifth card dealt.

In order to manage the timing requirements of the present invention, card database 300 includes the fields time dealt 320 and duration 322. As each card is dealt to the player, CPU 102 retrieves the current time from clock 106 and updates the time dealt field to indicate the current time. This allows CPU 102 to calculate how long the card has been exposed to the player so that future alterations may be made. Duration 322 indicates the amount of time that is to elapse before the next card alteration. Record 348, for example, shows a time dealt of 09:03:22 (hours/minutes/seconds) with a 120 second window before the card changes.

Referring now to Figure 4, a plan view is shown of gaming device 100 of the present invention which, for purposes of discussion, is generally divided into three sections: an upper panel 201, a display panel 202, an interface panel 204, and a lower panel 206. Upper panel 201 includes a pay table comprising, for example, pay amounts corresponding to various draw poker hands. These values correspond to those shown in the payout database 200 of Figure 2, and may be printed on glass with a back lighting scheme for maximum player visibility. Display panel 202 contains display area 500 which displays the card values to the player and acts as the player interface through the above described touch screen functionality. The elements of display area 500 will be described more fully with reference to Figure 5A below. Interface panel 204 houses starting controller 150, player tracking device 114 (including card reader 138, keypad 140, and display 142 shown set to read "INSERT CARD") and coin/bill acceptor 124. Lower panel 206 includes promotional messages which may serve to attract players to the game, or to provide rules/instructions concerning operation of the game.

In order to more fully describe the display area 500 of the present invention, reference is made to Figures 5A-H which illustrate an exemplary game play of the present invention.

Figure 5A shows an enlarged view of the display area 500 of Figure 4. This area is electronically displayed to the player and changes during the course of the game as described in more detail below. Game element signal request generator 510 labeled "DEAL A CARD" ("deal button") is used by the player to request another card, and is associated with the payment of one or more credits. Players touch the screen at this location, providing a signal to CPU 102 that another card has been requested. Location

520 is the area of display 500 ("screen") that displays cards which have been requested via deal button 510. The requested game element 525 ("card") in this embodiment is an electronic representation of a conventional playing card, and has a corresponding attribute 530 which identifies the rank and suit of the card. In the example shown in Figure 5A, the attribute 530 value is a rank of ace and a suit of hearts.

Players may choose to discard a dealt card by touching the discard button 535 labeled "DISCARD A CARD," transmitting a signal to CPU 102 to initiate further processing of the card as described more fully in Figure 10 below. Cards that are not discarded are placed within either game set 540 or game set 550. Game set 540 incorporates five card locations 560 through 568, each capable of displaying a particular game element 525. Game set 550 contains five card locations 570 through 578, with similar display capabilities. Players request to "cash-out" a particular game set 540 or 550 by pressing an evaluation signal generator 580 or 590 ("cash-out button"), respectively. Such a cash-out process is performed after the player has accumulated one or more cards 525 within a particular game set 540 or 550, with the cards 525 qualifying for a payout as indicated by payout field 220 of payout database 200.

In the example illustrated in Figure 5A, the player is dealt an ace of hearts as card 525, and must decide what to do with the card. Figure 5B illustrates the changes to display 500 which reflect the decision to place card 525 in location 560 of game set 540. The electronic representation of the ace of hearts is deleted from location 520 and then appears at location 560, responsive to the player indicating the location by touching the screen at location 560 thereby initiating a placement signal. At this point, the player is ready to request another card be dealt by touching deal button 510. In an alternative

embodiment, some cards 525 may be restricted to certain game sets 540 or 550. For example, royal cards might be restricted to game set 540. Cards 525 could also be restricted to an individual location, with the ace of spades restricted to location 560, for example.

Figure 5C shows a later stage of the game in which the player has placed cards 525 in game set 540, specifically locations 560 (ace of hearts), 562 (jack of spades), 564 (king of spades), and 566 (queen of diamonds). Location 568 shows no card 525 and is thus available to the player for future card placement. With four cards to the straight, the player may request cards 525 to be dealt in an effort to complete the straight with a ten of some suit. Such a hand, if cashed-out via cash-out button 580, would receive a payout of two coins as shown for record 242 of payout database 200. Game set 550 has been populated with only two cards 525 – location 570 (five of hearts) and 572 (five of clubs). The remaining three locations are available for additional cards. In this case, the player might be hoping for two more fives to complete a four of a kind, or for one more five to complete a three of a kind.

Figure 5D illustrates the time element of one embodiment of the present invention in that one of the cards 525 is indicating that it is about to change. Location 560 is highlighted as a warning to the player that the card is about to change to another rank or suit. The highlighting effect might take the form of a border that flashes, a color change, or a resizing of the card. Any mechanism sufficient to attract the attention of the player is sufficient. In one embodiment, location 560 remains the same visually but is accompanied by an audible warning. Figure 5E shows display 500 after the card 525 in location 560 has changed rank. In this example, the ace of hearts has been replaced with

the nine of hearts. Various protocols may be used in determining the value of the replacement card. The changed value could be determined in advance, assigned randomly, increased in sequence (e.g. cards always increase in rank and change from clubs to hearts to diamonds to spades and back again), decreased in sequence, etc. Some cards could increase while others decreased. Instead of changing value, the card could simply change location, moving from one game set to another.

After requesting another card by touching deal button 510, the player receives a ten of clubs as shown in Figure 5F. Although this card could be discarded or placed within game set 550, the player has noticed that the four existing cards 525 of game set 540 are missing only a ten in order to complete a straight, so the player selects this location by touching location 568 of game set 540. The ten of clubs is then deleted from location 520 and placed into location 568, with the result shown in Figure 5G. Having achieved a straight in game set 540, the player decides to receive payment by touching the cash-out button 580, which transmits a signal to CPU 102 to initiate the payment process as described in more detail with reference to Figure 13 below. Note that the player is encouraged to act quickly as the remaining cards 525 in locations 562 through 568 may change to other ranks or suits, either eliminating the straight or reducing the hand to a lower payout outcome such as a pair of kings. In rare cases, correct strategy might in fact be to wait for cards to change. A player with a game set including the ace, king, queen, and jack of spades along with a ten of clubs would have a straight and could cash-out for the value of a straight. If the ten of clubs were the next card to change, however, the player might wait in the hopes that the card changed suit to spades – completing the royal flush.

After receiving appropriate credit, all of the locations in game set 540 are cleared so that new cards 525 can be placed into them, as illustrated in Figure 5H. The player has requested another card 525 and has received the three of hearts as shown in location 520. Once again, the player faces the choice of discarding this card or placing it into one of the two game sets.

Referring now to Figure 6, there are shown several alternate embodiments of a card 525 in location 520, with a rank 610 of ace and a suit 615 of hearts. In one embodiment, the card has a lock button 620 and an unlock button 630. Lock button 620 is engaged by a touch from the player and serves to prevent the card from changing values. Such a lock might apply to either the rank 610 or the suit 615, or to a combination of both. A limit of one locked card per game set could be imposed, or the player could be charged one or more credits for the privilege of locking the card. In another embodiment, the locking process only serves to extend the duration of the card, or merely prevents the card from disappearing entirely. In embodiments where the number of locked cards is limited, unlock button 630 would allow players to switch the selection of which card is to be locked. In an alternative embodiment, the player is able to lock a series of one or more cards at the same time, such as by specifying a column of cards (e.g. the third location of each game set).

Card display 640 enables players to view the rank and suit that the card is scheduled to change into. In the example illustrated, the ace of hearts will turn into the king of clubs, the queen of hearts, the three of clubs, and finally into the four of spades. Such advance warning would allow players to more appropriately place their cards, although it would require relatively skillful play to coordinate the timing of the changes.

In order to improve the player's timing efforts, a countdown display 650 could be located on each card 525 to show the number of seconds before the next scheduled card change.

Although the embodiment described above receives player input via touch screen capability, those of ordinary skill will appreciate that such player requests may be made via physical buttons as well. In particular, each location 560 through 568 and 570 through 578 could be identified with the numerals 1 through 5 and 6 through 10, corresponding to ten like numbered buttons of gaming device 100. A player who wanted to place a card 525 in location 576 would thus depress the physical button labeled nine. Such buttons could also be associated with a particular row, such as by labeling the button "FIRST ROW SECOND POSITION," for example. Similar physical representations could be made for deal button 510, discard button 535, cash-out button 580, and cash-out button 590.

Description of the Operation

Having thus described the architecture of the gaming apparatus and components of the present embodiment, the operation of the apparatus will now be described in greater detail with reference to Figures 7-13 and continuing reference to Figures 1-6. It is to be understood that the software instructions necessary to provide the functionality described herein are preferably stored in storage device 104 of gaming device 100.

Referring now to Figure 7, a flowchart is depicted illustrating the major routines or processes executed by gaming device 100 during a typical game. At the beginning of a game, CPU 102 processes a deck initialization routine 800. Deck initialization routine

800 randomly arranges the cards of a standard deck of fifty-two playing cards. This process simulates the shuffling of a standard deck of fifty-two playing cards.

CPU 102 processes routines 900, 1000, 1100, 1200 and 1300 in an iterative fashion throughout the game. Deal card routine 900 deals a new card to the player upon request. Place card routine 1000 allows a player to place a dealt card in a location within display area 500. Place card routine 1000 also processes a player request to discard a card. Monitor/update card status routine 1100 instructs CPU 102 to maintain the cards that have been placed by or dealt to the player. The instructions of monitor/update card status routine 1100 determine when and how to alter the cards on the playing field.

Shuffle discards routine 1200 instructs CPU 102 when and how to shuffle the cards that have been discarded either explicitly by the player or automatically through the alteration of placed cards. Calculate payout routine 1300 instructs CPU 102 how to evaluate a hand upon the player's request. Calculate payout routine 1300 includes instructions for evaluating an identified hand, determining a corresponding payout amount and delivering the payout amount to the player.

Referring now to Figure 8, a flowchart is presented depicting the process steps of deck initialization routine 800. Deck initialization routine 800 initializes the records of card database 300 to simulate the shuffling of a standard deck of fifty-two playing cards. At step 810, CPU 102 is instructed to assign a unique card rank and suit combination to each record. This is accomplished by initializing card rank field 312 and suit field 314 of every record so that every record is defined to represent a different card in a standard fifty-two card deck. At step 812, CPU 102 is instructed to populate status field 316 of every record with data indicating that every card is "IN DECK." At step 814, CPU 102 is

instructed to populate card identifier field 310 of each record with a randomly generated, unique card identifier. Preferably, card identifiers are numbers between 1 and 52. At step 816, deck initialization process 800 instructs CPU 102 to populate each location field 318 with the contents of the corresponding card identifier field 310. This indicates each card's relative location within the shuffled deck of cards.

Referring now to Figure 9, a flowchart is presented depicting the process steps of deal card routine 900. Generally, deal card routine 900 determines when to deal a card to the player, selects a record from card database 300 representing the card to be dealt, and displays the card to the player. At step 910, CPU 102 is instructed to check for a card request signal from the player. The card request signal is generated by a player touching deal button 510 on video display 500, and may be checked by polling for an input or receiving a hardware interrupt. At decision step 912, CPU 102 is instructed to end the routine if a card request signal is not received. In the event a card request signal is received, CPU 102 processes step 914 and identifies the record representing the next card to be dealt. Step 914 may be accomplished by maintaining a pointer to the next card to be dealt. Alternatively, step 914 may be accomplished by searching location field 318 of card database 300 for the record having the lowest value and a status of "IN DECK." At steps 916 and 918, CPU 102 is instructed to update the identified card record to indicate that it has been dealt. This is accomplished by updating the contents of status field 316 to "DEALT," and populating time dealt field 320 and duration field 322 with data representing the current system time and a display duration, respectively. The display duration may be a fixed value, such as 120 seconds, or it may be randomly assigned

within a range of values, depending on the implementation. At step 920, the card is displayed on the video display by CPU 102.

Referring now to Figure 10, a flowchart is presented depicting the process steps of card placement routine 1000. Generally, card placement routine 1000 processes a user request to place or discard a dealt card. At step 1010, CPU 102 is instructed to determine whether a card discard signal has been received indicating that the player has requested the dealt card to be discarded. If a card discard signal is received, decision step 1012 directs CPU 102 to process steps 1014 and 1016. At step 1014, CPU 102 updates status field 316 of the record representing the most recently dealt card. The status field is changed to reflect a status of "DISCARDED." At step 1016, CPU 102 removes the card from video display 500.

If a card discard signal is not received, CPU 102 determines whether a card placement signal has been received at step 1018. If a card placement signal has not been received, decision block 1020 directs CPU 102 to end card placement process 1000. Otherwise, CPU 102 processes step 1022, 1024 and 1026 to complete a card placement. At step 1022, CPU 102 receives the location selection of the player identifying the location to which the dealt card is to be placed. At step 1024, the contents of location field 318 of the record representing the dealt card is updated to reflect the placement of the card. Card placement routine concludes with step 1026 which instructs CPU 102 to display the card at the selected location. Although step 1026 may simply entail erasing the card from the dealt location and redisplaying it at the selected location, step 1026 may be performed using animation.

The card status monitor/update routine 1100 will now be described with reference to Figures 11A and 11B. Routine 1100 is performed for every record representing a displayed card and begins with step 1110, wherein CPU 102 is instructed to determine whether to display a warning indicia. Typically, a warning indicia will be displayed for a short time prior to the time that a card changes or expires. The determination of step 1112 can be accomplished by comparing the system time to the contents of time dealt field 320 plus the contents of duration field 322 less some pre-determined constant representing a warning duration. If a warning is required, decision step 1112 directs CPU 102 to process steps 1114 and 1116. Step 1114 directs CPU 102 to update status field 316 of the record corresponding to the card that is about to change or expire. Depending on the contents of status field 316, step 1114 causes the status to change from "DEALT" to "FIRST ALTERATION WARNING," from "FIRST ALTERATION" to "FINAL ALTERATION WARNING," or from "FINAL ALTERATION" to "EXPIRATION WARNING." The appropriate warning indicia, such as a flashing border or highlighted card, is displayed on video display 500 at step 1116.

If no warning is required, step 1112 directs CPU 102 to determine whether the display duration of the card has elapsed, as shown by step 1118. If the display duration has not elapsed, decision block 1120 terminates routine 1100. Otherwise, it determines whether the card is expiring or changing its value at step 1122. If the card is not changing its value, decision step 1124 instructs CPU 102 to continue processing at step 1130. If the card is expiring, CPU 102 processes step 1126 and updates status field 316 of the record with data indicating that the card is "DISCARDED." At step 1128, CPU 102 removes the card from the field of play on video display 500.

Process steps 1130-1138 describe the steps required to change the attributes of a card. At step 1130, CPU 102 identifies a replacement record in card database 300. The replacement record may be selected in any number of manners including randomly selecting the replacement record from all records representing the cards in the deck or selecting the record representing the next available card from the deck. At step 1132, CPU 102 updates status field 316, location field 318, time dealt field 320 and duration field 322 of the replacement card record. Step 1132 initializes the replacement record to take the place of the displayed record. Status field 316 of the replacement record is changed to "DEALT." Location field 318 of the replacement record is set equal to location field 318 of the displayed record. Time dealt field 320 is populated with the system time. Duration field 322 may be populated with a fixed time or a randomly generated time from within a range of possible durations.

At step 1134, CPU 102 updates status field 316 of the record representing the displayed card to indicate that the card has been "DISCARDED." At step 1136, CPU 102 removes the displayed card from the field of play on video display 500. At step 1138, CPU 102 displays the card represented by the replacement record.

Referring now to Figure 12, a flowchart is presented depicting the process steps of shuffle discard routine 1200. Generally, shuffle discard routine 1200 simulates the shuffling of the discarded cards. At step 1210, CPU 102 is determines whether the discarded cards should be shuffled. Such a determination may be based on the number of records representing cards in the deck, or the number of records representing discarded cards. If the discarded cards should be shuffled, decision step 1212 directs CPU 102 to

continue processing at step 1214. Otherwise, CPU 102 is directed to terminate the routine.

At step 1214, CPU 102 randomly reassigns all of the card identifiers to the records having a status of "DISCARDED." Step 1214 essentially shuffles the card identifiers of the records representing discarded cards. At step 1216, CPU 102 changes the contents of status field 316 to "IN DECK" for all records having status field 316 containing "DISCARDED." At step 1218, CPU 102 populates location field 318 of the shuffled records with the corresponding card identifier to indicate the position within the deck. Although the preferred embodiment envisions placing the shuffled cards at the end of the deck, other variations are possible. Note that for embodiments in which an infinite deck is used, there is no need to shuffle the discards as there is an inexhaustible supply of new cards to be dealt.

Referring now to Figure 13, a flowchart is presented depicting the process steps of payout calculation routine 1300. At step 1310, CPU 102 determines whether a payout request signal has been received from the player. At decision step 1312, if no payout request signal has been received, the routine terminates. Otherwise, CPU 102 identifies the hand that the player has requested to cash out at step 1314. At step 1316, CPU 102 determines the outcome of the hand based on the records corresponding to the displayed cards of the identified hand. Determining the outcome of step 1316 is essentially determining the strength of the hand (e.g. three of a kind or a straight). For those hands in which fewer than five cards are required (e.g. three of a kind) the remaining cards may have an assigned class of a null game element so as to allow analysis of hands without five cards placed. At step 1318, CPU 102 retrieves a payout corresponding to the

determined outcome, and awards the payout at step 1320. Awarding the payout may include activating hopper 130 to dispense the awarded payout or updating credit data (not shown) stored by data storage device 104. Payout levels may depend on the number of coins wagered per card dealt.

Referring now to Figure 14, there is shown a plan view of gaming device 1400, a slot machine for conducting a game of chance in accordance with an alternate embodiment of the present invention. Gaming device 1400 not only includes conventional components of a traditional three reel slot machine, but also many of the components of gaming device 100 described with respect to the video poker embodiment illustrated by Figures 1-13.

As shown, gaming device 1400 includes a conventional three reel slot machine mechanism on the lower portion of the device. After placing a wager, a player begins a slot machine game by pulling the traditional slot handle or by pressing start button 1420. Beginning a game initiates the rotation of the three slot reels, reel 1432, reel 1434 and reel 1436. At least one slot reel includes a reel stop 1430 bearing a new card symbol representing a new card.

Unlike gaming device 100, a player may not simply purchase a new card to play the video poker game displayed on the upper portion of gaming device 1400. A new card is provided to a player only upon spinning the slot reels and achieving a result including new card symbol 1430. Upon achieving a result including new card symbol 1430, a game element request signal is generated based on the slot result and the player is provided a new card for the video poker game, the player proceeding with the video poker game as previously described with reference to Figures 1-13.

Gaming device 1400 allows a player to participate in two games simultaneously, thereby enhancing the gaming experience. Gaming device 1400 further encourages a player to initiate more plays per hour in order to achieve as many new card symbols 1430 as possible to complete or improve poker hand 1440 or 1410, displayed in the upper display area of the device.

While the best mode for carrying out the invention has been described in detail, those familiar with the art to which the invention relates will recognize various alternative designs and embodiments for practicing the invention. These alternative embodiments are within the scope of the present invention. Accordingly, the scope of the present invention embodies the scope of the claims appended hereto.

What is claimed is:

1. A method for directing a computing device to conduct a game of chance, the method comprising the steps of:

generating a subject game element having a first class;

displaying the subject game element, thereby displaying an indicia of the first class;

assigning a second class to the subject game element; and

displaying the subject game element, thereby displaying an indicia of the second class.

2. The method of claim 1 wherein the subject game element represents a standard playing card.

3. The method of claim 2 wherein the first class includes a first rank and the second class includes a second rank.

4. The method of claim 2 wherein the first class includes a first suit and the second class includes a second suit.

5. The method of claim 1 further including the steps of:

receiving a placement signal; and

displaying the subject game element at a first location in accordance with the placement signal.

6. The method of claim 5 wherein a pre-displayed game element is assigned to the first location, the step of displaying the subject game element at a first location including the steps of:

assigning the subject game element to the first location;

displaying the subject game element at the first location, thereby overwriting the pre-displayed game element.

7. The method of claim 5 wherein the placement signal represents a selection of a first game set from among a plurality of game sets, the first game set including at least the first location.

8. The method of claim 7 further including the steps of:

determining a display duration of the subject game element;

erasing the subject game element from the first location;

identifying a second game set having a corresponding second location;

assigning the subject game element to the second location; and

displaying the subject game element at the second location upon expiration of the display duration.

9. The method of claim 7 including the step of

receiving an evaluation signal specifying a game set; and

evaluating an outcome of the specified game set.

10. The method of claim 9 wherein a null game element is associated with at least one game element location corresponding to the specified game set.

11. The method of claim 1 further comprising the step of receiving a request signal representing a request to display the subject game element.

12. The method of claim 1 further comprising the step of randomly generating a request signal representing a request to generate the subject game element.

13. The method of claim 12 wherein the step of randomly generating a request signal includes

generating a random slot result; and

generating the request signal based on the slot result.

14. The method of claim 13 wherein the step of determining a first class is based on the slot result.

15. The method of claim 1 further including the steps of:

determining a maximum display duration corresponding to the subject game element, the maximum display duration representing an amount of time that the subject game element may be displayed with the corresponding first class;

determining an elapsed display duration corresponding to the subject game element, the elapsed display duration representing an amount of time that the subject game element has been displayed with the corresponding first class;

determining whether the elapsed display duration is within a predetermined range of the maximum display duration; and

if the elapsed display duration is within the predetermined range of the maximum display duration, displaying an indicia representing forthcoming expiration of the first class corresponding to the subject game element.

16. A method for directing a computing device to conduct a game of chance, the method comprising the steps of:

generating a plurality of game elements, each game element having a corresponding class;

displaying each of the plurality of game elements, thereby displaying an indicia of each of the corresponding class;

receiving a selection signal representing a selection of a subject game element from among the plurality of displayed game elements;

assigning a second class to the subject game element; and

displaying the subject game element, thereby displaying an indicia of the second class.

17. A method for directing a computing device to conduct a game of chance, the method comprising the steps of:

generating a game element having a first class;

displaying the game element, thereby displaying an indicia of the first class;

determining a display duration of the game element; and

erasing said game element upon expiration of said display duration.

18. A method for directing a computing device to conduct a game of chance, the method comprising the steps of:

receiving a game element request signal;

generating a game element having a first class;

displaying the game element, thereby displaying an indicia of the first class;

receiving a placement signal;

displaying said game element at a location in accordance with said placement signal;

assigning a second class to the game element; and

displaying the game element, thereby displaying an indicia of the second class.

19. A computing device for conducting a game of chance, the device including:

a memory; and

a processor operatively connected to the memory;

the memory for storing:

game element data corresponding to a subject game element, the game element data including a class identifier representing a class of the subject game element, and

a program for controlling the processor; and

the processor operative with the program to perform the steps of:

generating and storing the game element data representing the subject game element having a first class,

displaying the subject game element, thereby displaying an indicia of the first class,

generating and storing the class identifier, thereby assigning a second class to the subject game element, and

displaying the subject game element, thereby displaying an indicia of the second class.

20. The computing device of claim 19 wherein the processor is further operative with the program to perform the steps of:

receiving a placement signal; and

displaying the subject game element at a first location in accordance with the placement signal.

21. The computing device of claim 20 wherein the placement signal represents a selection of a first game set from among a plurality of game sets, the first game set including at least the first location.

22. The computing device of claim 21 wherein the processor is further operative with the program to perform the steps of:

determining a display duration of the subject game element;

erasing the subject game element from the first location;

identifying a second game set having a corresponding second location;

assigning the subject game element to the second location; and

displaying the subject game element at the second location upon expiration of the display duration.

23. The computing device of claim 21 wherein the processor is further operative with the program to perform the steps of:

receiving an evaluation signal specifying a game set; and

evaluating an outcome of the specified game set.

24. The computing device of claim 19 wherein the processor is operative with the program to perform the step of receiving a request signal representing a request to display said subject game element.

25. The computing device of claim 19 wherein the processor is further operative with the program to perform the step of randomly generating a request signal representing a request to generate the subject game element.

26. The computing device of claim 19 wherein the processor is further operative with the program to perform the steps of:

determining a maximum display duration corresponding to the subject game element, the maximum display duration representing an amount of time that the subject game element may be displayed with the corresponding first class;

determining an elapsed display duration corresponding to the subject game element, the elapsed display duration representing an amount of time that the subject game element has been displayed with the corresponding first class;

determining whether the elapsed display duration is within a predetermined range of the maximum display duration; and

displaying an indicia representing forthcoming expiration of the first class corresponding to the subject game element if the elapsed display duration is determined to be within the predetermined range of the maximum display duration.

27. A computing device for conducting a game of chance, the device including:

a memory; and

a processor operatively connected to the memory;

the memory for storing:

game element data corresponding to each of a plurality of game elements, the game element data including a class identifier representing a corresponding class of the game element, and

a program for controlling the processor; and

the processor operative with the program to perform the steps of:

generating and storing the game element data for each of the plurality of game elements having a corresponding class;

displaying each of the plurality of game elements, including an indicia of each of the corresponding class;

receiving a selection signal representing a selection of a subject game element from among the plurality of displayed game elements;

generating and storing the class identifier corresponding to the subject game element, thereby assigning a second class to the subject game element, and

displaying the subject game element, thereby displaying an indicia of the second class.

28. A computing device for conducting a game of chance, the device including:

a memory; and

a processor operatively connected to the memory;

the memory for storing:

game element data corresponding to a game element, the game element data including a class identifier representing a class of the game element; and

a program for controlling the processor; and

the processor operative with the program to perform the steps of:

generating and storing the game element data representing the game element having a first class;

displaying the game element, thereby displaying an indicia of the first class;

determining a display duration of the game element; and

erasing said game element upon expiration of said display duration.

29. A computing device for conducting a game of chance, the device including:

a memory; and

a processor operatively connected to the memory;

the memory for storing:

game element data corresponding to a game element, the game element data including a class identifier representing a class of the game element; and

a program for controlling the processor; and

the processor operative with the program to perform the steps of:

receiving a game element request signal;

generating and storing the game element data representing the game element having a first class;

displaying the game element, thereby displaying an indicia of the first class;

receiving a placement signal;

displaying said game element at a location in accordance with said placement signal;

generating and storing the class identifier, thereby assigning a second class to the game element; and

displaying the game element, thereby displaying an indicia of the second class.

30. A computing device for conducting a game of chance, the device comprising:

means for generating a subject game element having a first class;

means for displaying the subject game element, thereby displaying an indicia of the first class;

means for assigning a second class to the subject game element; and

means for displaying the subject game element, thereby displaying an indicia of the second class.

31. A computing device for conducting a game of chance, the device comprising:

means for generating a plurality of game elements, each game element having a corresponding class;

means for displaying each of the plurality of game elements, thereby displaying an indicia of each of the corresponding class;

means for receiving a selection signal representing a selection of a subject game element from among the plurality of displayed game elements;

means for assigning a second class to the subject game element; and

means for displaying the subject game element, thereby displaying an indicia of the second class.

32. A computing device for conducting a game of chance, the device comprising:

means for generating a game element having a first class;

means for displaying the game element, thereby displaying an indicia of the first class;

means for determining a display duration of the game element; and

means for erasing said game element upon expiration of said display duration.

33. A computing device for conducting a game of chance, the device comprising:

means for receiving a game request signal;

means for generating a game element having a first class;

means for displaying the game element, thereby displaying an indicia of the first class;

means for receiving a placement signal;

means for displaying the game element at a location in accordance with the placement signal;

means for assigning a second class to the game element; and

means for displaying the game element, thereby displaying an indicia of the second class.

34. A computer-readable storage medium encoded with processing instructions for conducting a game of chance, the processing instructions for directing a computer to perform the steps of:

generating a subject game element having a first class;

displaying the subject game element, thereby displaying an indicia of the first class;

assigning a second class to the subject game element; and

displaying the subject game element, thereby displaying an indicia of the second class.

35. A computer-readable storage medium encoded with processing instructions for conducting a game of chance, the processing instructions for directing a computer to perform the steps of:

receiving a game element request signal;

generating a game element having a first class;

displaying the game element, thereby displaying an indicia of the first class;

receiving a placement signal;

displaying said game element at a location in accordance with said placement signal;

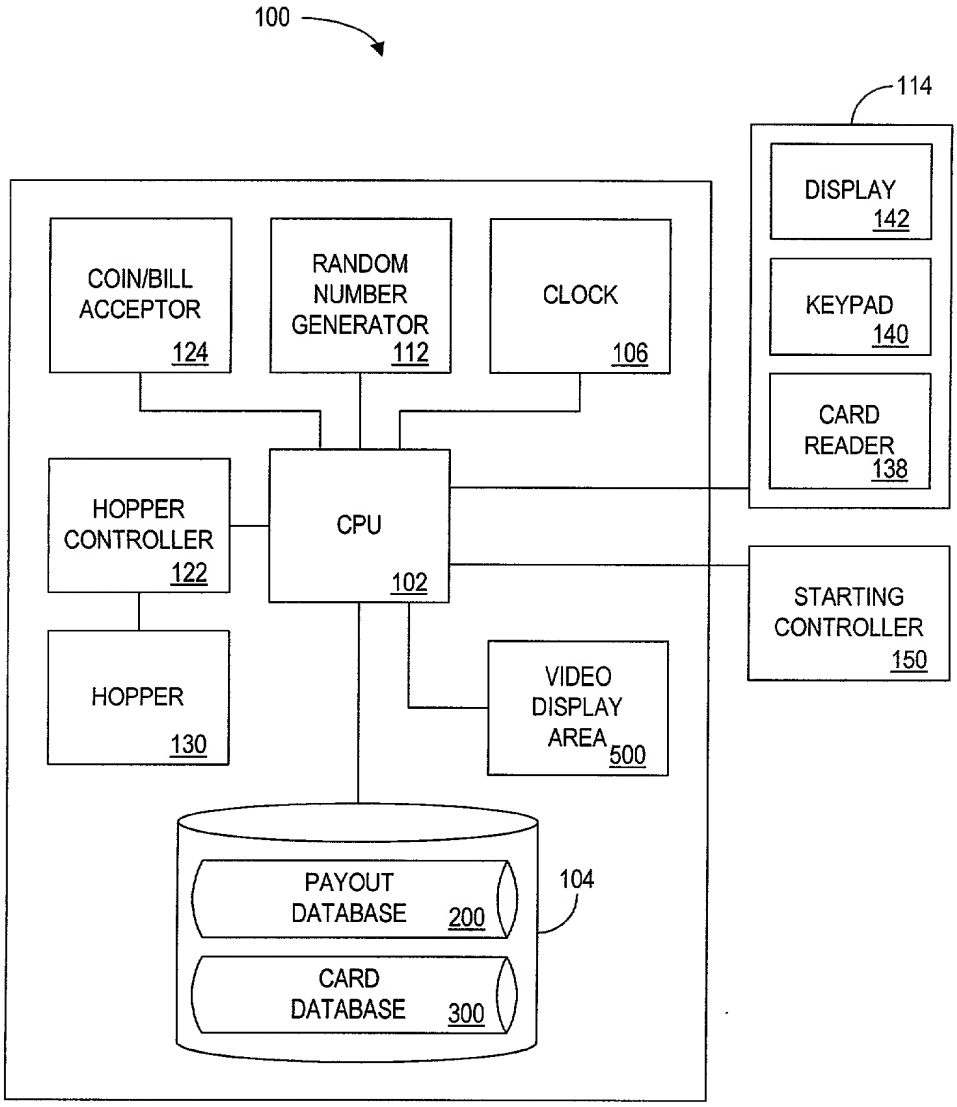
assigning a second class to the game element; and

displaying the game element, thereby displaying an indicia of the second class.

Abstract of the Invention

An electronic amusement device and a method for operating the device are disclosed. The device conducts a game of chance that preferably incorporates game elements that change and expire during the game. The device performs the steps of generating and displaying a subject game element having a first class. The step of displaying includes displaying an indicia of the first class. The device further assigns a second class to the subject game element, and displays the subject game element, thereby displaying an indicia of the second class.

0593-4469-0505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KEYPAD
140
CARD
READER
138
COIN/BILL
ACCEPTOR
124
RANDOM
NUMBER
GENERATOR
112
CLOCK
106
HOPPER
CONTROLLER
122
CPU
102
STARTING
CONTROLLER
150
HOPPER
130
VIDEO
DISPLAY
AREA
500
104
PAYOUT
DATABASE
200
CARD
DATABASE
300

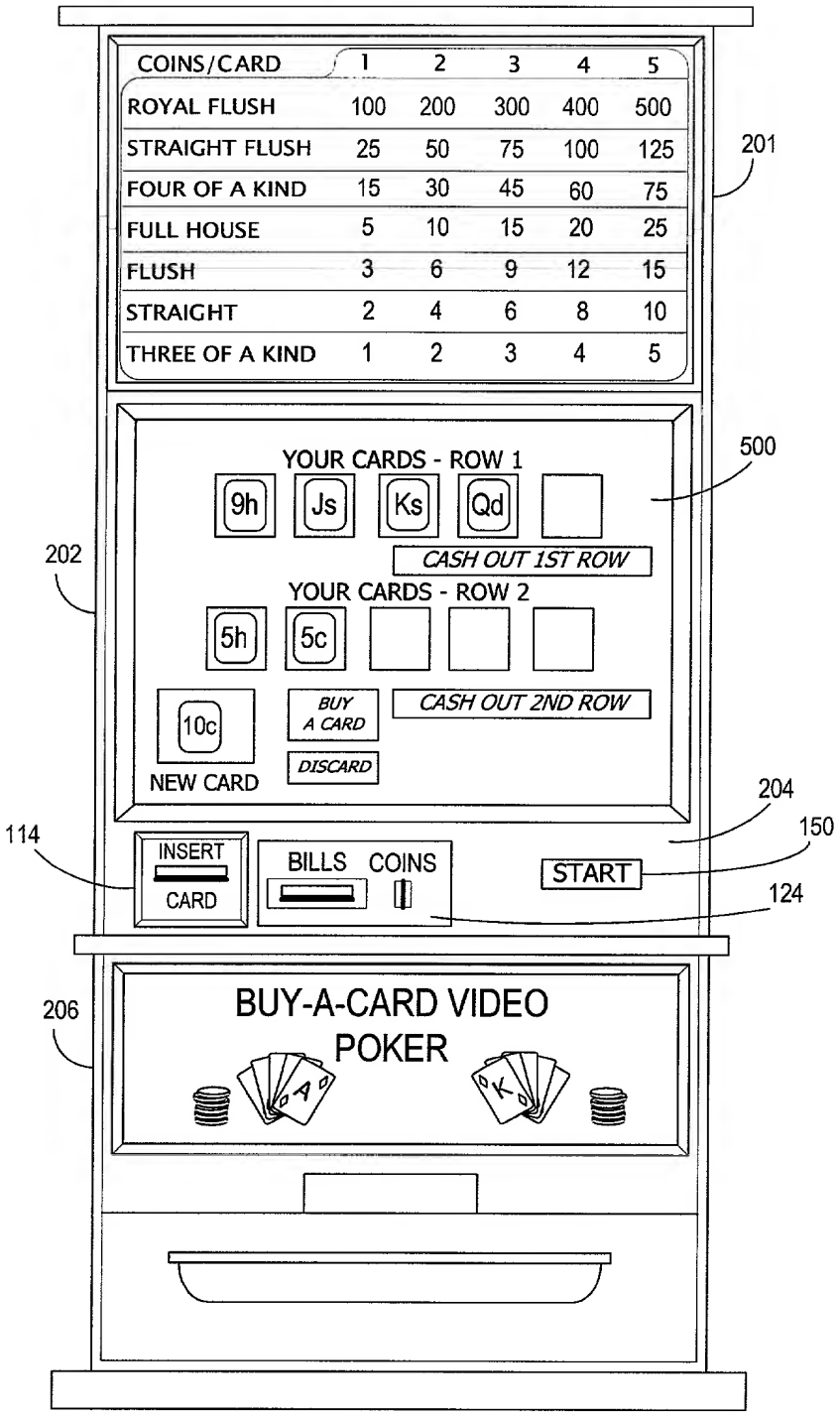
FIG. 1

	OUTCOME 210	PAYOUT 220
232	ROYAL FLUSH	$100
234	STRAIGHT FLUSH	$25
236	FOUR OF A KIND	$15
238	FULL HOUSE	$5
240	FLUSH	$3
242	STRAIGHT	$2
244	THREE OF A KIND	$1
246	TWO PAIR	$0
248	ONE PAIR	$0
250	HIGH CARD	$0

FIG. 2

	CARD IDENTIFIER 310	RANK 312	SUIT 314	STATUS 316	LOCATION 318	TIME DEALT 320	DURATION 322
340	11	8	CLUB	IN DECK	5	N/A	N/A
342	26	10	HEART	DEALT	FIRST ROW SECOND POSITION	09:05:36	120 SECONDS
344	32	J	CLUB	DEALT	FIRST ROW THIRD POSITION	09:05:39	120 SECONDS
346	15	4	SPADE	DISCARDED	DISCARDS	08:56:25	N/A
348	9	A	DIAMOND	FIRST ALTERATION WARNING	FIRST ROW FIRST POSITION	09:03:22	120 SECONDS

FIG. 3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ROYAL FLUSH 100 200 300 400 500
STRAIGHT FLUSH 25 50 75 100 125
FOUR OF A KIND 15 30 45 60 75
FULL HOUSE 5 10 15 20 25
FLUSH 3 6 9 12 15
STRAIGHT 2 4 6 8 10
THREE OF A KIND 1 2 3 4 5
201
YOUR CARDS - ROW 1
9h
Js
Ks
Qd
500
CASH OUT 1ST ROW
202
YOUR CARDS - ROW 2
5h
5c
10c
NEW CARD
BUY A CARD
DISCARD
CASH OUT 2ND ROW
204
150
114
INSERT CARD
BILLS COINS
START
124
206
BUY-A-CARD VIDEO POKER

FIG. 4

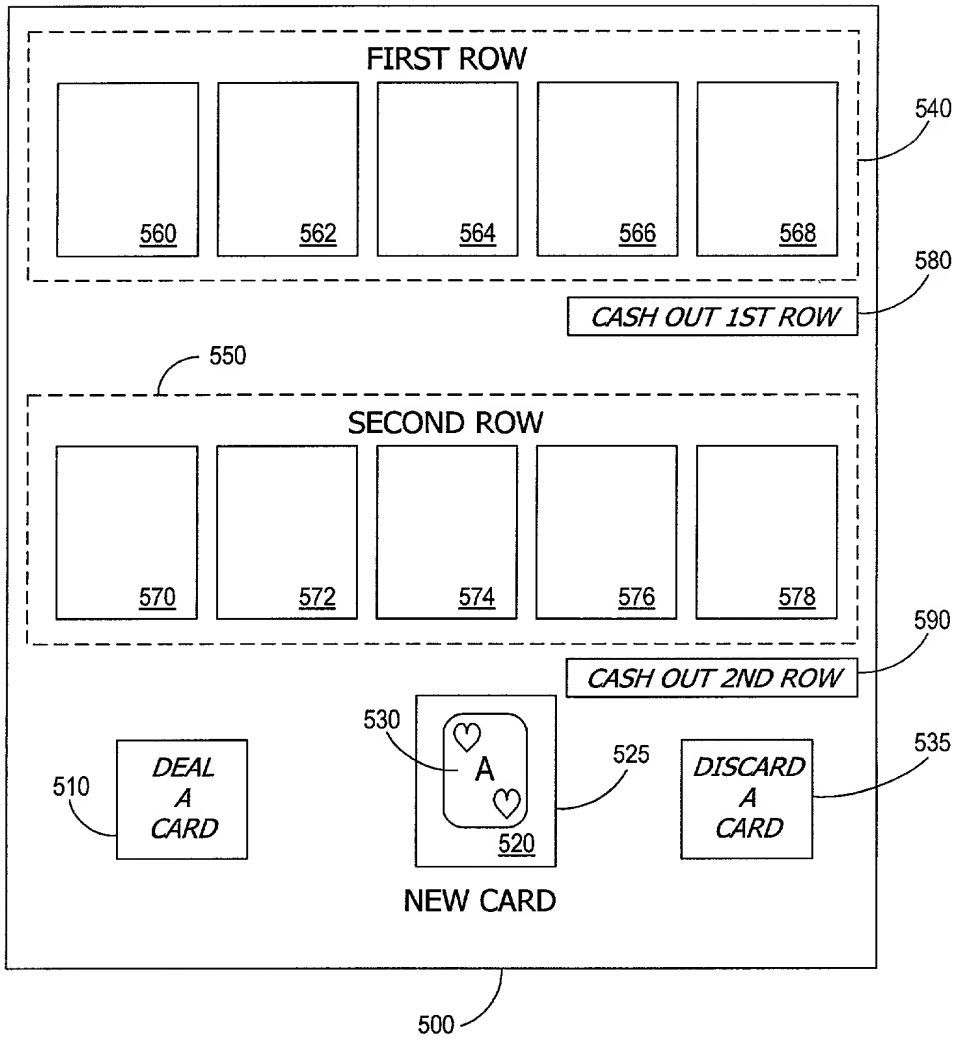
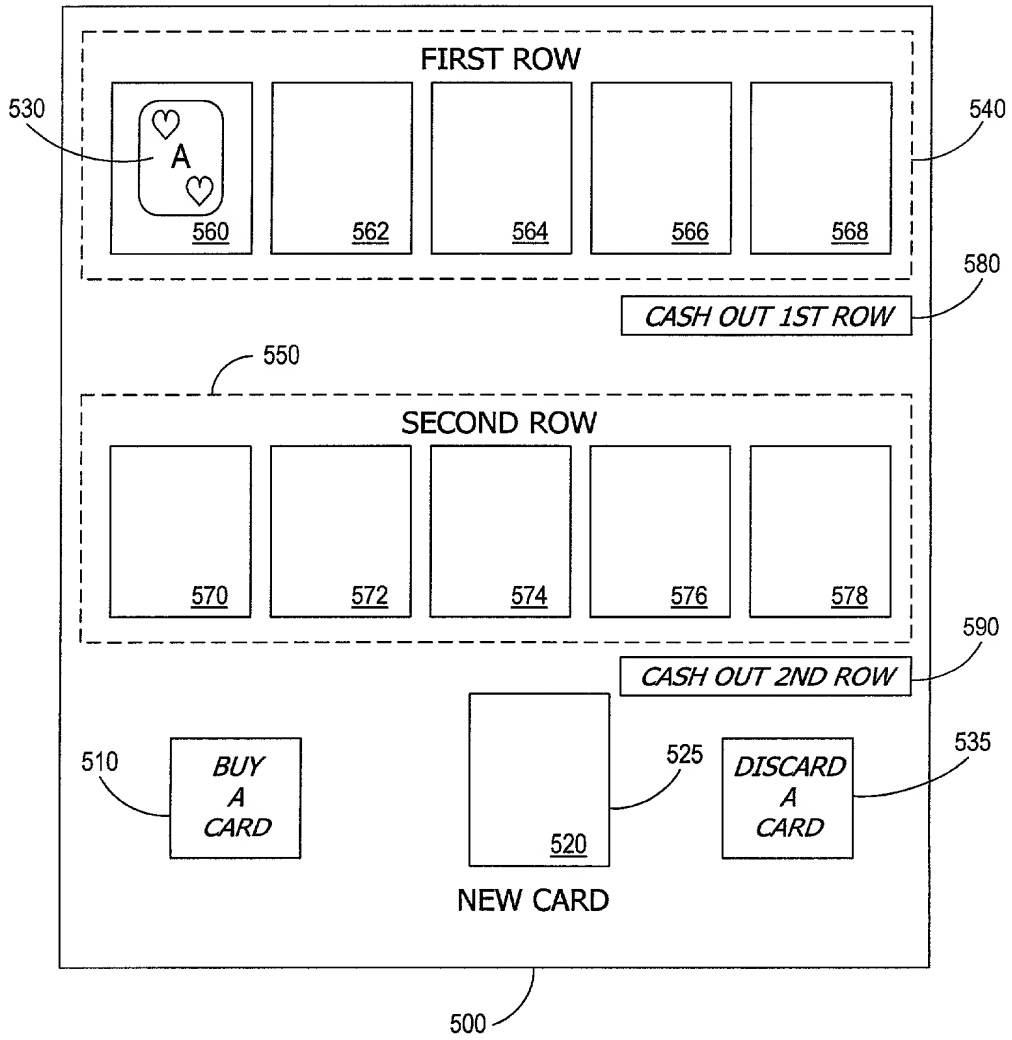

FIRST ROW
560
562
564
566
568
540
580
CASH OUT 1ST ROW
550
SECOND ROW
570
572
574
576
578
590
CASH OUT 2ND ROW
530
A
520
525
535
510
DEAL A CARD
DISCARD A CARD
NEW CARD
500

FIG. 5A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530
A
560
562
564
566
568
540
580
CASH OUT 1ST ROW
550
SECOND ROW
570
572
574
576
578
590
CASH OUT 2ND ROW
510
BUY A CARD
520
525
NEW CARD
DISCARD A CARD
535
500

FIG. 5B

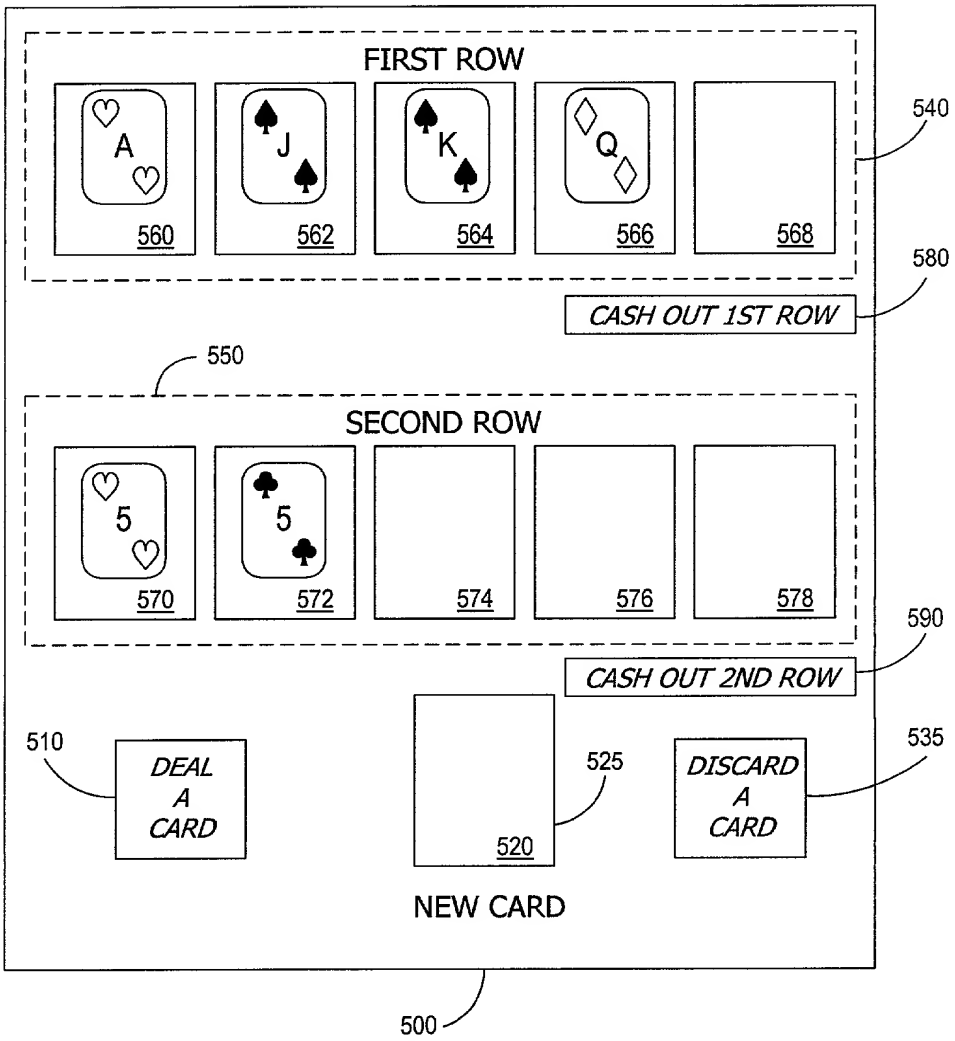
FIRST ROW
A
560
J
562
K
564
Q
566
568
540
580
CASH OUT 1ST ROW
550
SECOND ROW
5
570
5
572
574
576
578
590
CASH OUT 2ND ROW
510
DEAL A CARD
520
525
NEW CARD
DISCARD A CARD
535
500

FIG. 5C

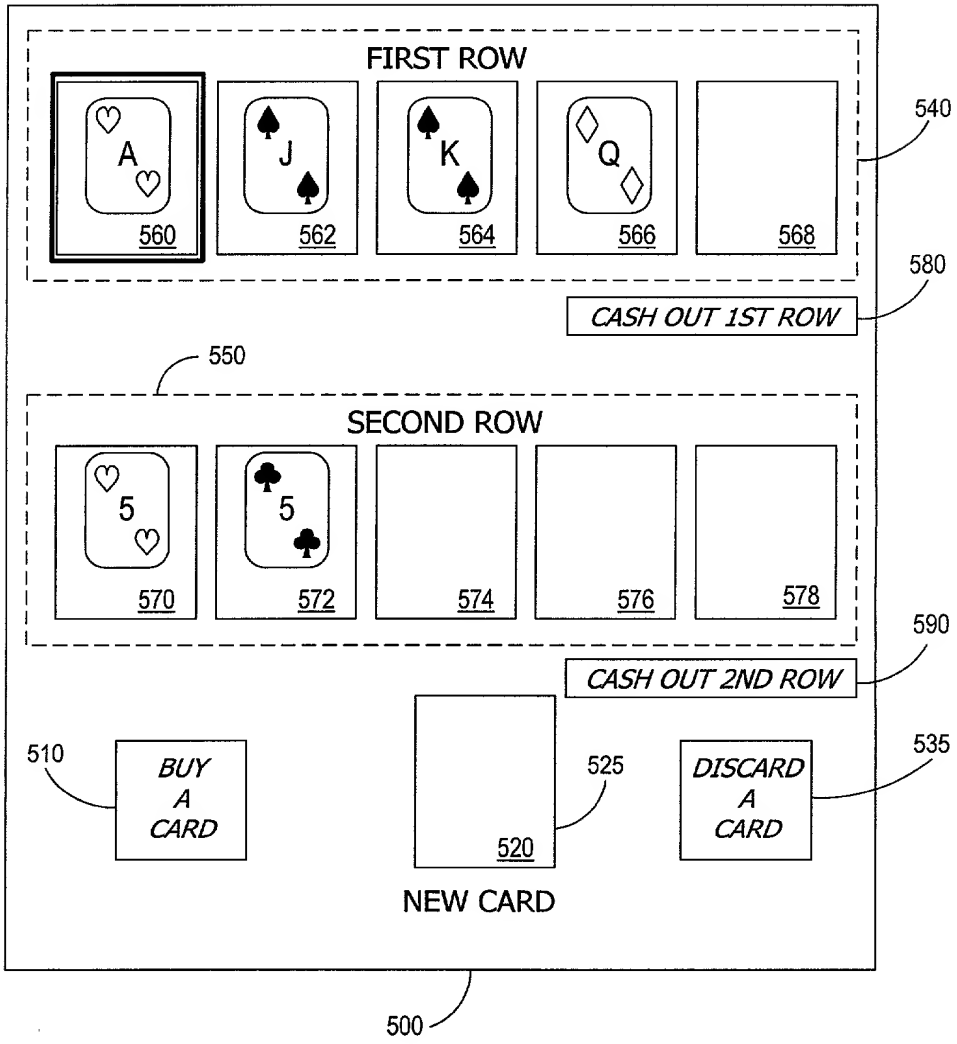
FIRST ROW
A
560
J
562
K
564
Q
566
568
540
580
CASH OUT 1ST ROW
550
SECOND ROW
5
570
5
572
574
576
578
590
CASH OUT 2ND ROW
510
BUY A CARD
520
525
NEW CARD
DISCARD A CARD
535
500

FIG. 5D

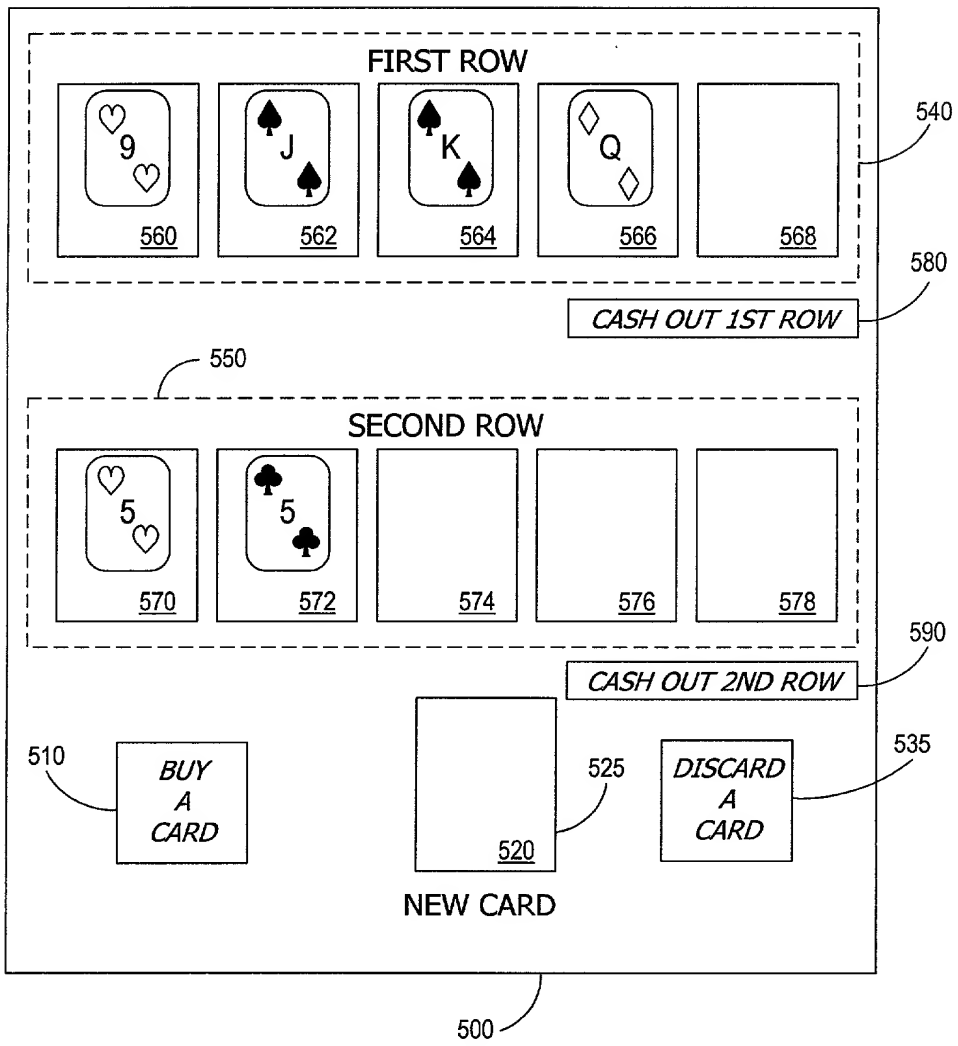
FIRST ROW
9
560
J
562
K
564
Q
566
568
540
580
CASH OUT 1ST ROW
550
SECOND ROW
5
570
5
572
574
576
578
590
CASH OUT 2ND ROW
510
BUY A CARD
520
525
NEW CARD
DISCARD A CARD
535
500

FIG. 5E

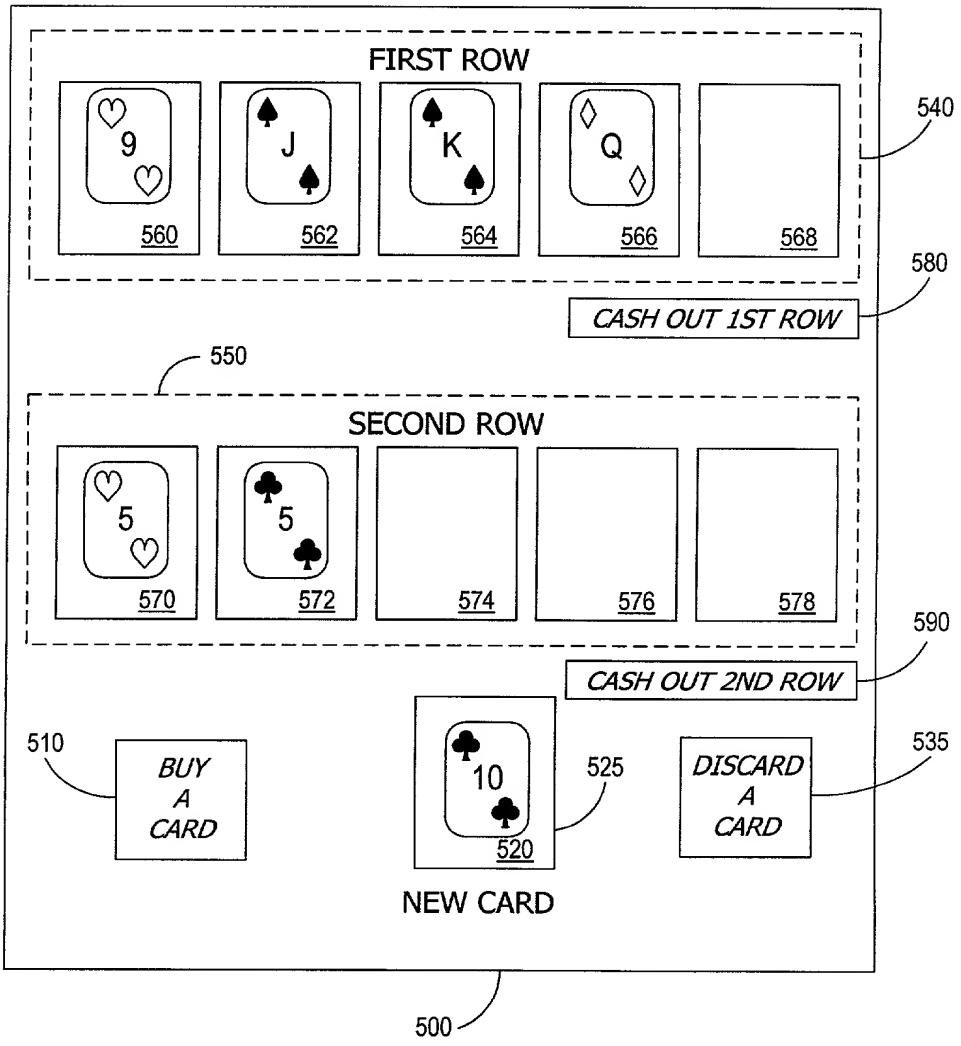
FIRST ROW
9
560
J
562
K
564
Q
566
568
540
580
CASH OUT 1ST ROW
550
SECOND ROW
5
570
5
572
574
576
578
590
CASH OUT 2ND ROW
510
BUY A CARD
10
520
525
NEW CARD
DISCARD A CARD
535
500

FIG. 5F

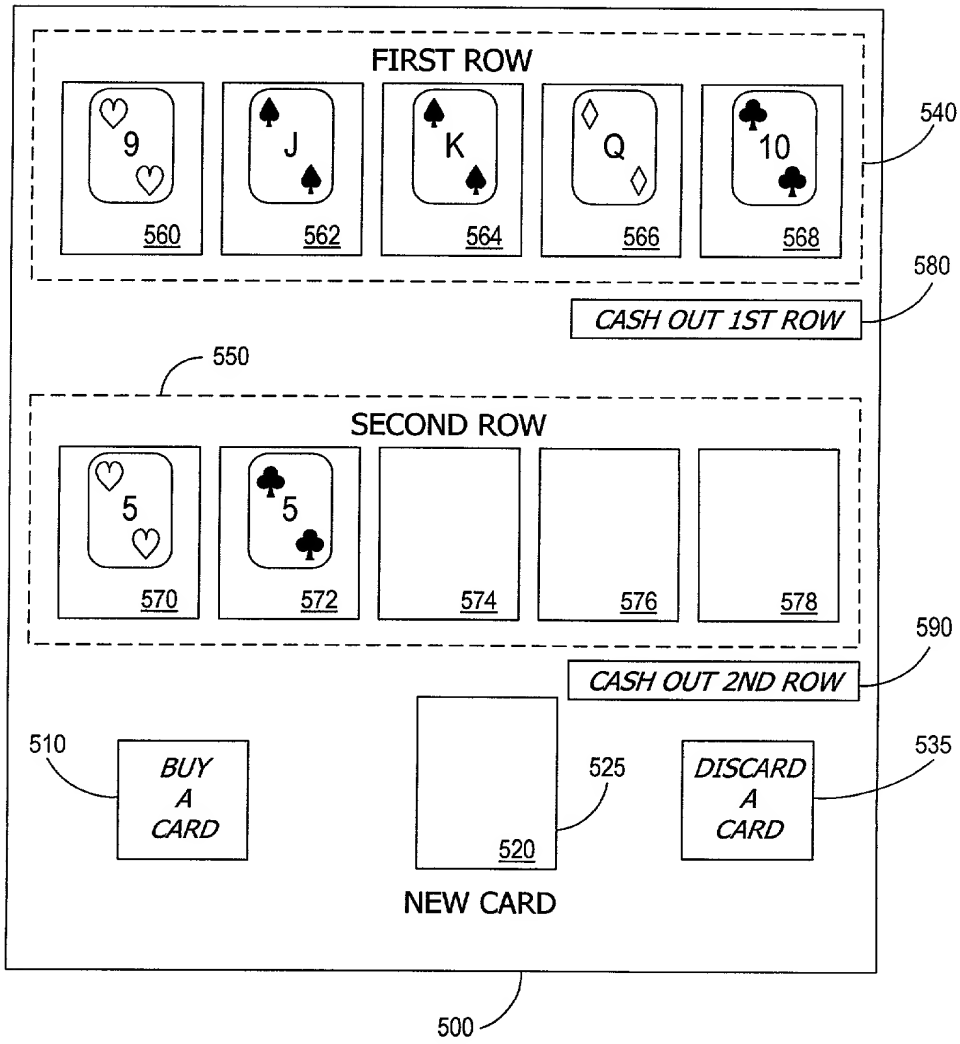
FIRST ROW
9
560
J
562
K
564
Q
566
10
568
540
580
CASH OUT 1ST ROW
550
SECOND ROW
5
570
5
572
574
576
578
590
CASH OUT 2ND ROW
510
BUY A CARD
520
525
NEW CARD
DISCARD A CARD
535
500

FIG. 5G

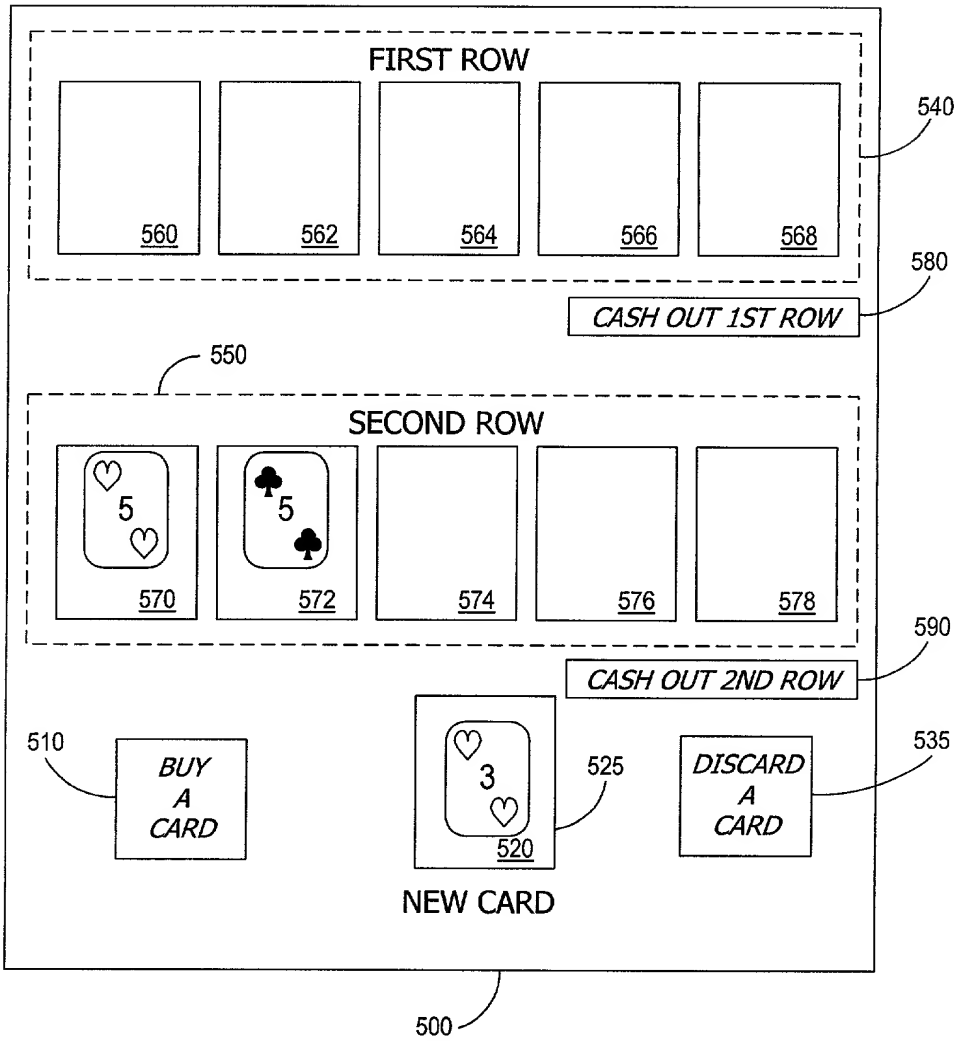
FIRST ROW
560
562
564
566
568
540
580
CASH OUT 1ST ROW
550
SECOND ROW
5
570
5
572
574
576
578
590
CASH OUT 2ND ROW
510
BUY A CARD
3
520
525
NEW CARD
DISCARD A CARD
535
500

FIG. 5H

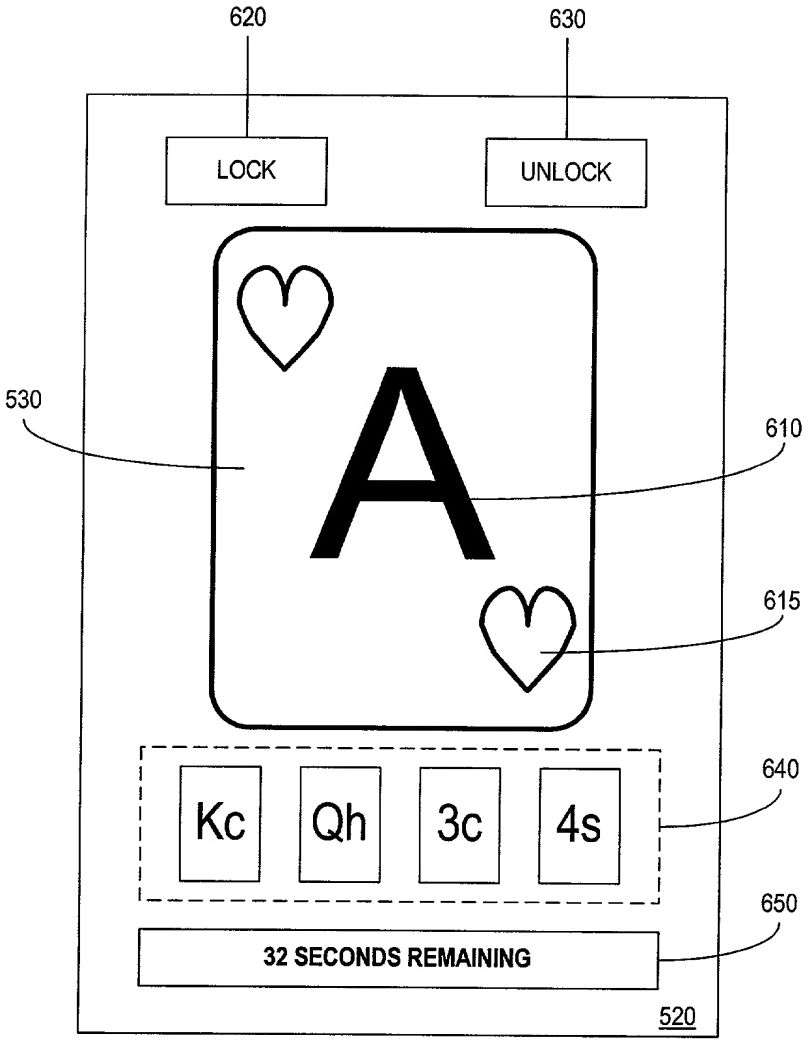
620
630
LOCK
UNLOCK
530
610
615
A
Kc
Qh
3c
4s
640
650
32 SECONDS REMAINING
520

FIG. 6

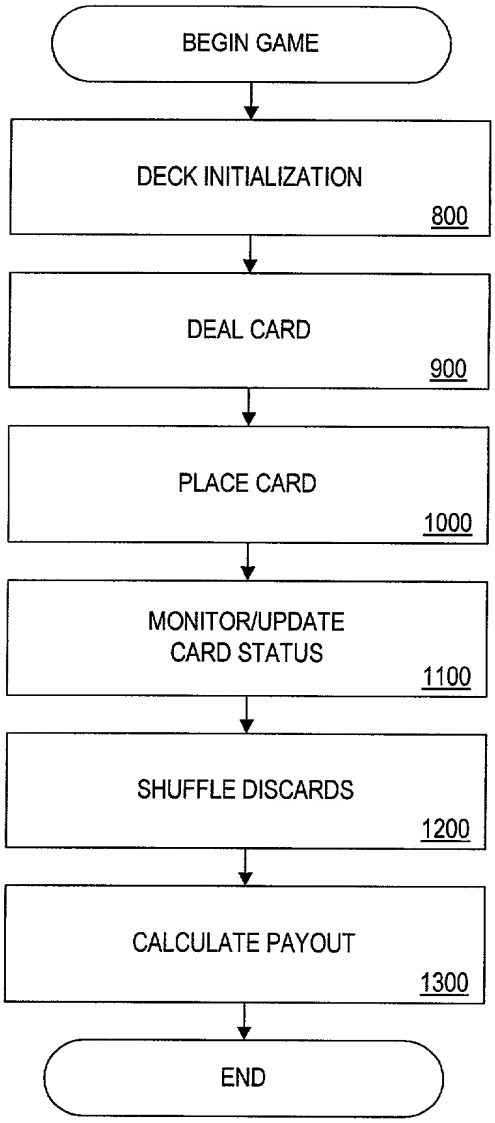
BEGIN GAME
DECK INITIALIZATION
800
DEAL CARD
900
PLACE CARD
1000
MONITOR/UPDATE
CARD STATUS
1100
SHUFFLE DISCARDS
1200
CALCULATE PAYOUT
1300
END

FIG. 7

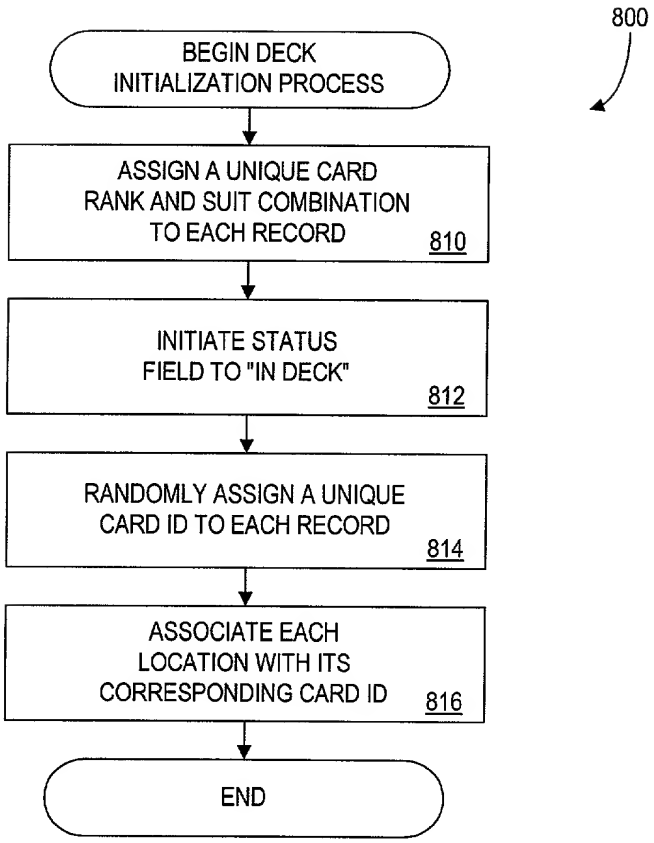
800
BEGIN DECK INITIALIZATION PROCESS
ASSIGN A UNIQUE CARD RANK AND SUIT COMBINATION TO EACH RECORD
810
INITIATE STATUS FIELD TO "IN DECK"
812
RANDOMLY ASSIGN A UNIQUE CARD ID TO EACH RECORD
814
ASSOCIATE EACH LOCATION WITH ITS CORRESPONDING CARD ID
816
END

FIG. 8

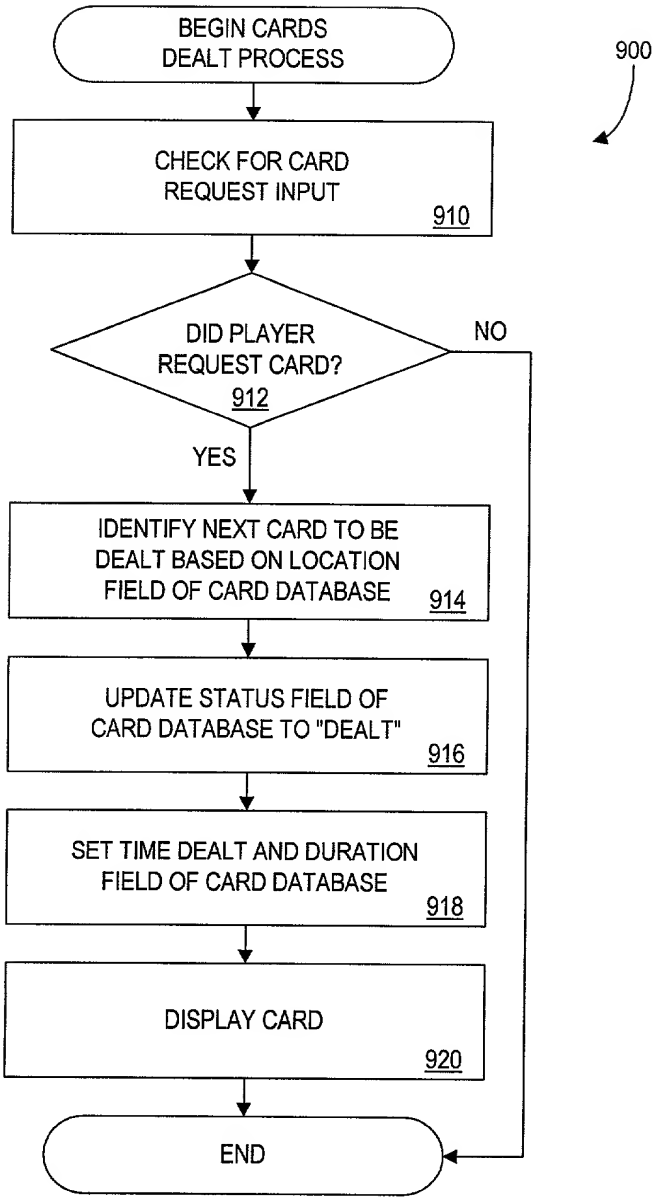
BEGIN CARDS DEALT PROCESS
900
CHECK FOR CARD REQUEST INPUT
910
DID PLAYER REQUEST CARD?
912
NO
YES
IDENTIFY NEXT CARD TO BE DEALT BASED ON LOCATION FIELD OF CARD DATABASE
914
UPDATE STATUS FIELD OF CARD DATABASE TO "DEALT"
916
SET TIME DEALT AND DURATION FIELD OF CARD DATABASE
918
DISPLAY CARD
920
END

FIG. 9

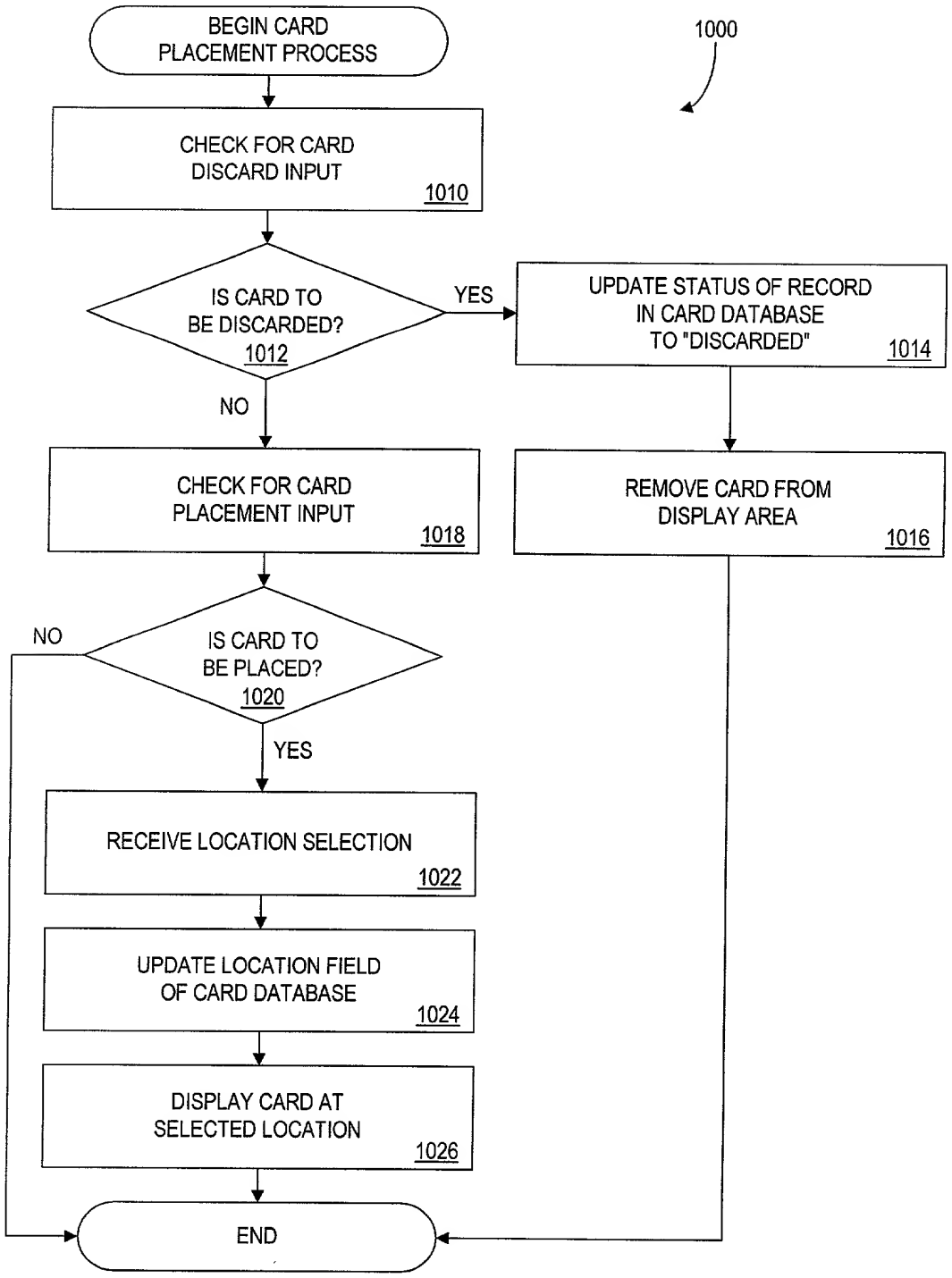
BEGIN CARD PLACEMENT PROCESS
1000
CHECK FOR CARD DISCARD INPUT
1010
IS CARD TO BE DISCARDED?
1012
YES
UPDATE STATUS OF RECORD IN CARD DATABASE TO "DISCARDED"
1014
NO
CHECK FOR CARD PLACEMENT INPUT
1018
REMOVE CARD FROM DISPLAY AREA
1016
NO
IS CARD TO BE PLACED?
1020
YES
RECEIVE LOCATION SELECTION
1022
UPDATE LOCATION FIELD OF CARD DATABASE
1024
DISPLAY CARD AT SELECTED LOCATION
1026
END

FIG. 10

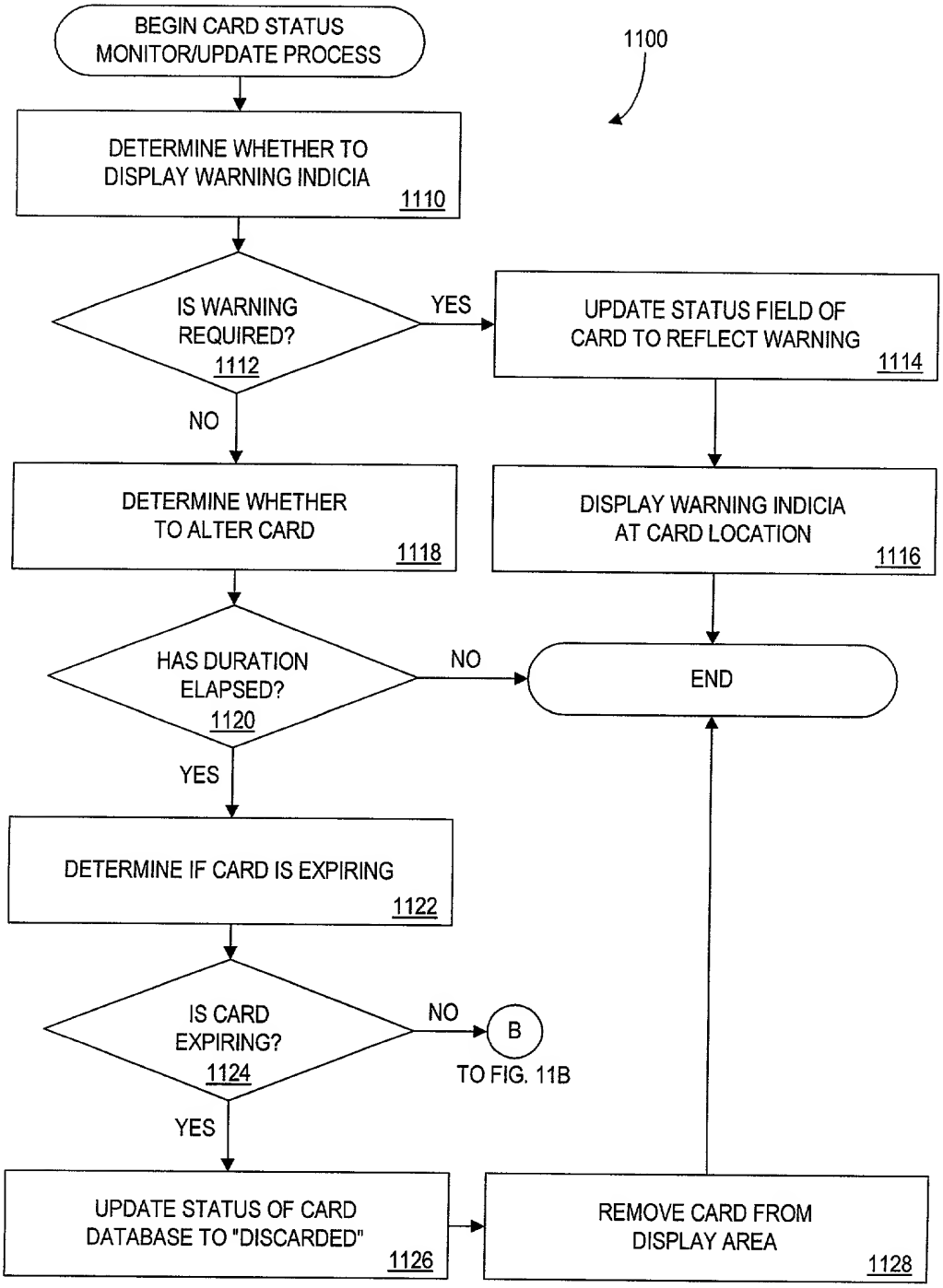
BEGIN CARD STATUS MONITOR/UPDATE PROCESS
1100
DETERMINE WHETHER TO DISPLAY WARNING INDICIA
1110
IS WARNING REQUIRED?
1112
YES
UPDATE STATUS FIELD OF CARD TO REFLECT WARNING
1114
NO
DETERMINE WHETHER TO ALTER CARD
1118
DISPLAY WARNING INDICIA AT CARD LOCATION
1116
HAS DURATION ELAPSED?
1120
NO
END
YES
DETERMINE IF CARD IS EXPIRING
1122
IS CARD EXPIRING?
1124
NO
B
TO FIG. 11B
YES
UPDATE STATUS OF CARD DATABASE TO "DISCARDED"
1126
REMOVE CARD FROM DISPLAY AREA
1128

FIG. 11A

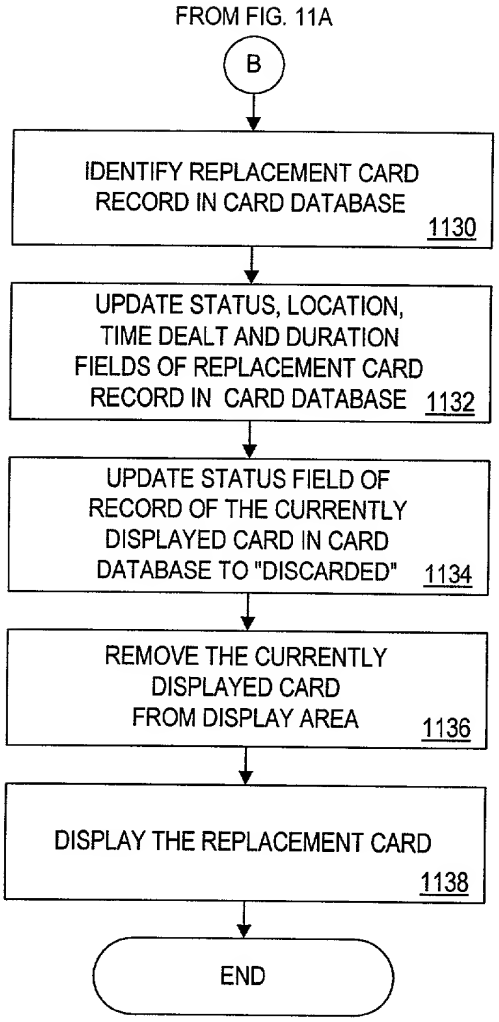
FROM FIG. 11A
B
IDENTIFY REPLACEMENT CARD RECORD IN CARD DATABASE 1130
UPDATE STATUS, LOCATION, TIME DEALT AND DURATION FIELDS OF REPLACEMENT CARD RECORD IN CARD DATABASE 1132
UPDATE STATUS FIELD OF RECORD OF THE CURRENTLY DISPLAYED CARD IN CARD DATABASE TO "DISCARDED" 1134
REMOVE THE CURRENTLY DISPLAYED CARD FROM DISPLAY AREA 1136
DISPLAY THE REPLACEMENT CARD 1138
END

FIG. 11B

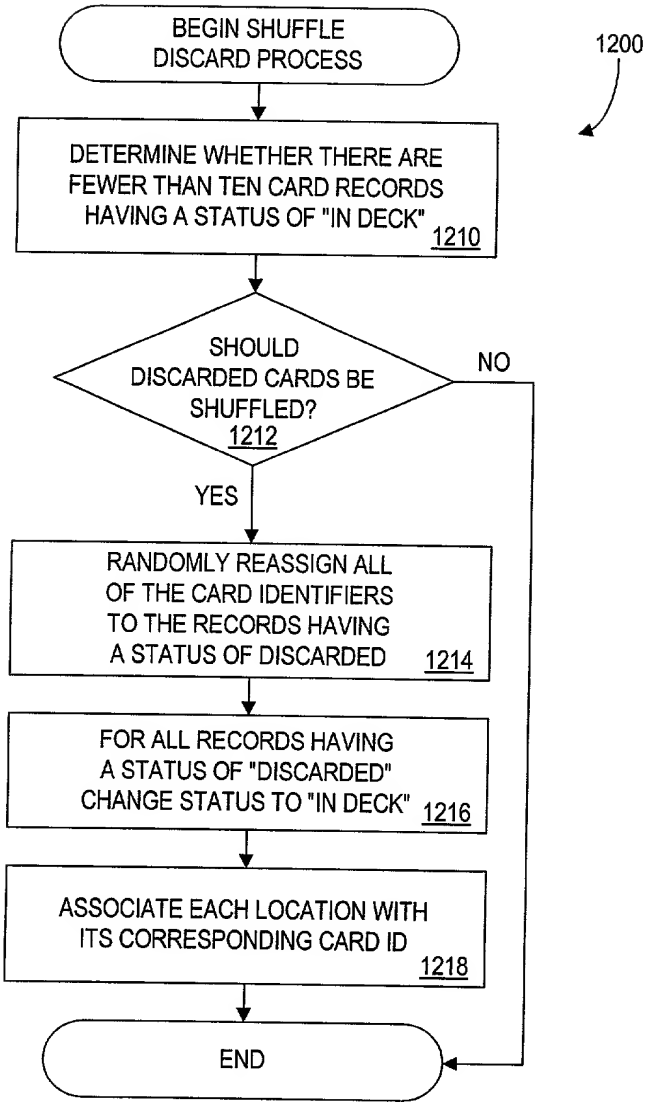
BEGIN SHUFFLE DISCARD PROCESS
1200
DETERMINE WHETHER THERE ARE FEWER THAN TEN CARD RECORDS HAVING A STATUS OF "IN DECK" 1210
SHOULD DISCARDED CARDS BE SHUFFLED? 1212
NO
YES
RANDOMLY REASSIGN ALL OF THE CARD IDENTIFIERS TO THE RECORDS HAVING A STATUS OF DISCARDED 1214
FOR ALL RECORDS HAVING A STATUS OF "DISCARDED" CHANGE STATUS TO "IN DECK" 1216
ASSOCIATE EACH LOCATION WITH ITS CORRESPONDING CARD ID 1218
END

FIG. 12

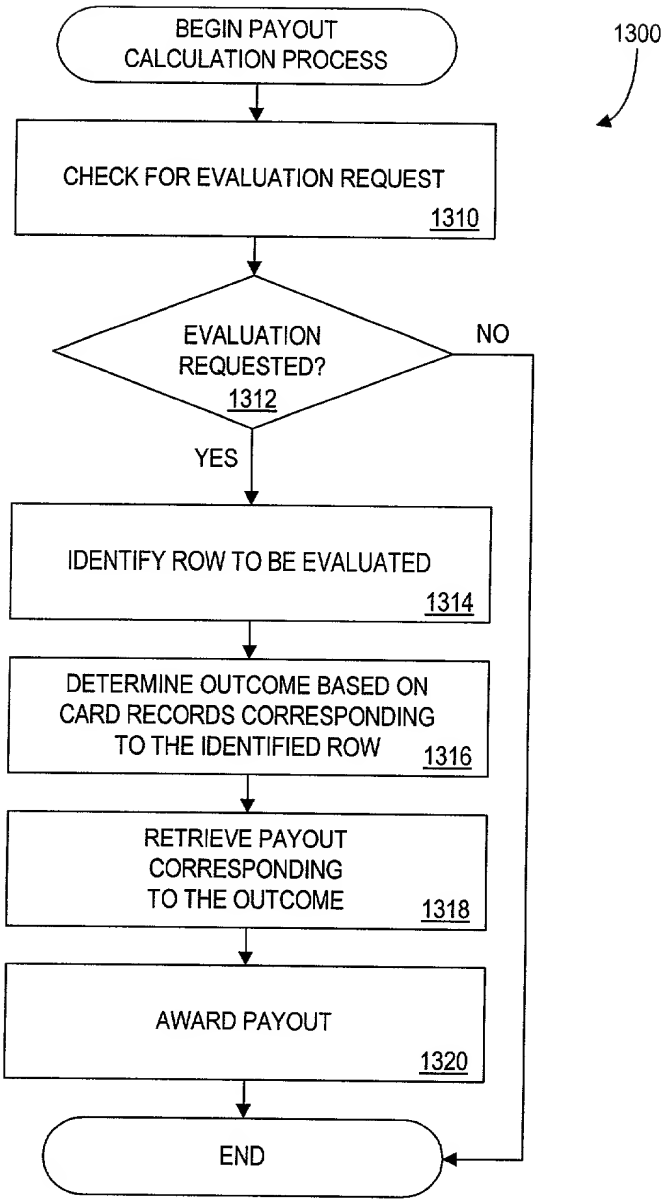
BEGIN PAYOUT CALCULATION PROCESS
1300
CHECK FOR EVALUATION REQUEST
1310
EVALUATION REQUESTED?
1312
NO
YES
IDENTIFY ROW TO BE EVALUATED
1314
DETERMINE OUTCOME BASED ON CARD RECORDS CORRESPONDING TO THE IDENTIFIED ROW
1316
RETRIEVE PAYOUT CORRESPONDING TO THE OUTCOME
1318
AWARD PAYOUT
1320
END

FIG. 13

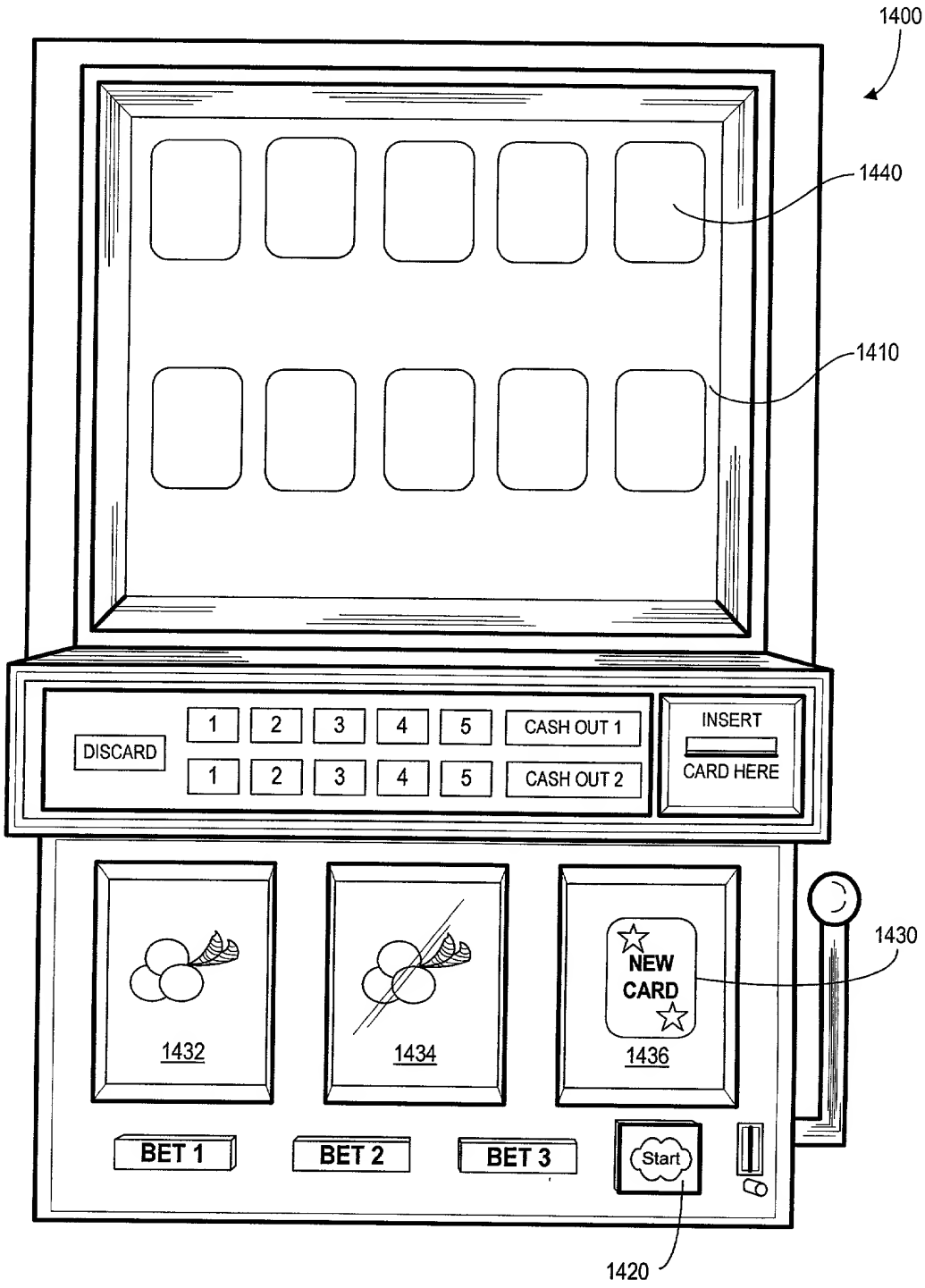
1400
1440
1410
DISCARD
1
2
3
4
5
CASH OUT 1
1
2
3
4
5
CASH OUT 2
INSERT
CARD HERE
1430
NEW
CARD
1432
1434
1436
BET 1
BET 2
BET 3
Start
1420

FIG. 14

COPY

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship is as stated below next to my name(s),

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

ELECTRONIC AMUSEMENT DEVICE AND METHOD FOR OPERATING SAME

the specification of which (*check one*)

☒ is attached hereto; or

☐ was filed on _____ as application serial no. _____ and was amended on _____ (if applicable); or

☐ was described and claimed in international application no. _____ filed on _____ and as amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above, and that it contains a full, clear, concise and exact description of the subject matter for which a patent is sought.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

Prior Application(s)

☐ (Check if applicable) I hereby claim foreign priority benefits under Title 35, United States Code § 119, by checking the box(es) below, any foreign application(s) for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

			Priority Claimed?
_____ (Number)	_____ (Country)	_____ (Day/month/year filed)	☐ yes ☐ no
_____ (Number)	_____ (Country)	_____ (Day/month/year filed)	☐ yes ☐ no

☐ (Check if applicable) I hereby claim the benefit under Title 35, United States Code § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose material information as defined in the Title 37, Code of Federal Regulations § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of the application:

Prior U.S. Application(s)

_____ (Application Number)	_____ (Day/month/year filed)	_____ (Status – Issued, pending, abandoned)
_____ (Application Number)	_____ (Day/month/year filed)	_____ (Status – Issued, pending, abandoned)
_____ (Application Number)	_____ (Day/month/year filed)	_____ (Status – Issued, pending, abandoned)

❑ (Check if applicable) In this continuation-in-part application, insofar as the subject matter of any of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose material information as defined in the Title 37, Code of Federal Regulations § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of the application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge and the like so made are punishable by fine or imprisonment, or both under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint Jeffrey L. Brandt - Reg. No. 31,490, Robert R. Lech – Reg. No. 37,169 and Dean Alderucci – Reg. No. 40,484 of Walker Digital Corporation, whose address is Five High Ridge Park, Stamford, Connecticut 06905-1326 as my attorneys with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Please address all written correspondence to:

Walker Digital Corporation
Five High Ridge Park
Stamford, Connecticut 06905-1326
Phone (203) 705-3000
Fax (203) 595-8266

Wherefore I pray that Letters Patent be granted to me for the invention or discovery described and claimed in the foregoing specification and claims, and I hereby subscribe my name to the foregoing specification and claims, declaration, power of attorney, and this petition.

Full name of sole or first inventor: Jay S. WALKER
Residence: 124 Spectacle Lane, Ridgefield, CT 06877
Post Office Address: same as above
Citizenship: (U.S.A.)
Inventor's signature _____ Date January 9, 1998

Full name of second inventor: James A. JORASCH
Residence: 25 Forest Street, Apt 5G, Stamford, CT 06901
Post Office Address: same as above
Citizenship: (U.S.A.)
Inventor's signature _____ Date January 9, 1998

Full name of third inventor: Robert R. LECH
Residence: 3 Valley View Road #25, Norwalk, CT 06851
Post Office Address: same as above
Citizenship: (U.S.A.)
Inventor's signature _____ Date January 9, 1998